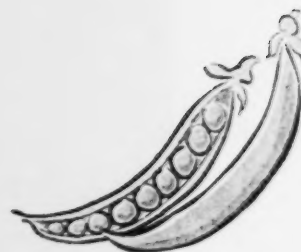


Manitoba
Agriculture
and Food



Program & Policy Analysis

**2001
Manitoba
Pulse,
Forage &
Specialty
Crops
Industry
Profiles
- 2002**



CONTENTS

	Pages
- BUCKWHEAT SECTOR	1-8
- CANARY SEED SECTOR	9-16
- DRY BEAN SECTOR	17-24
- DRY PEA SECTOR	25-32
- FABABEAN SECTOR	33-38
- LENTIL SECTOR	39-46
- MUSTARD SEED SECTOR	47-54
- FORAGE SECTOR	55-62

N/A - not available

^R - Revised

^P - Preliminary

Data sources: *Agriculture and Agri-Food Canada*
 Manitoba Agriculture and Food
 Statistics Canada

For further information, please contact:

Market Analysis & Statistics Section
Program and Policy Analysis Branch

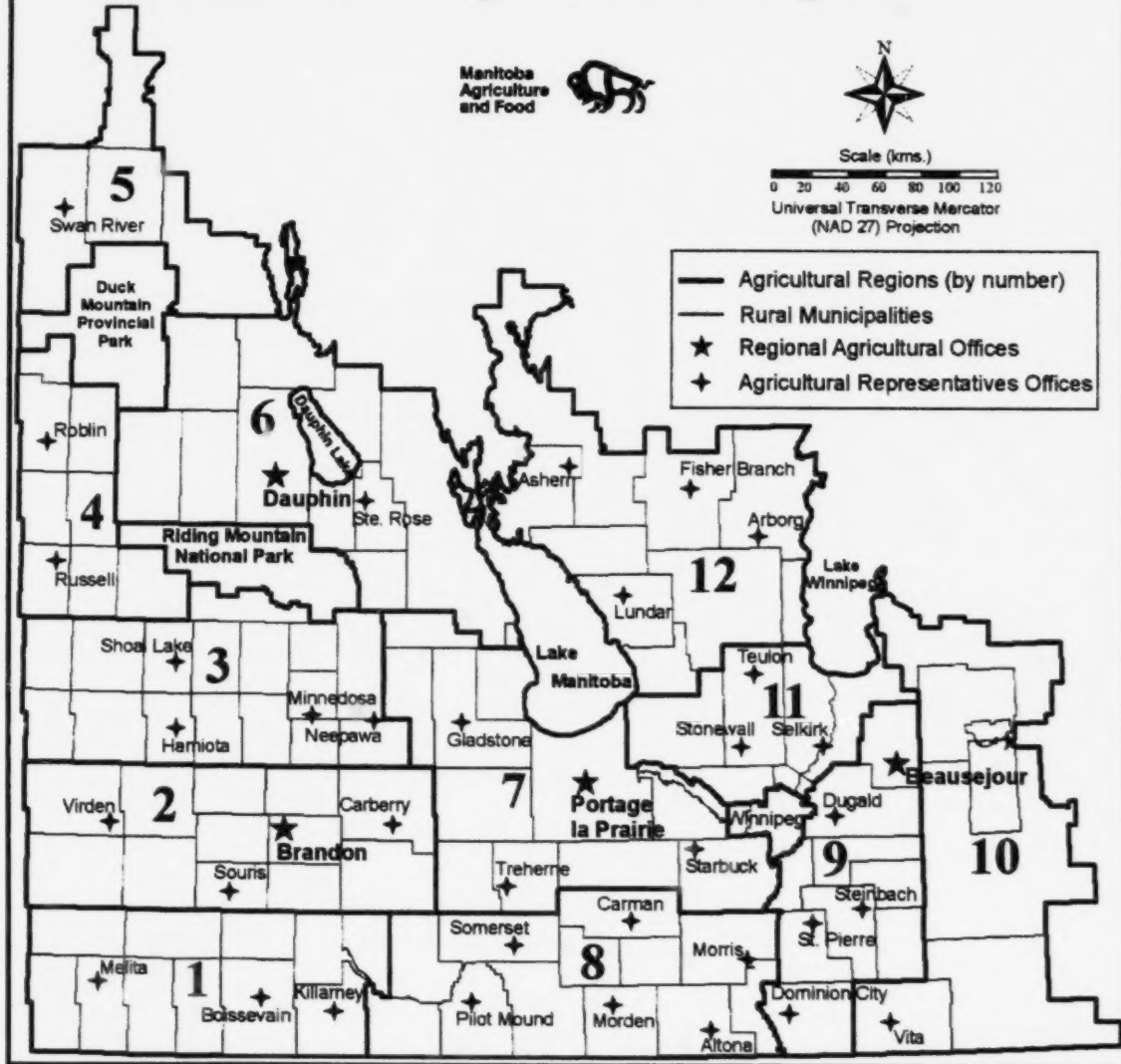
Phone: (204) 945-4017 or 945-2364

Fax: (204) 948-2844

e-mail: cgunvaldsen@gov.mb.ca or [jhoney@gov.mb.ca](mailto:jhonev@gov.mb.ca)

January, 2003

Manitoba Agricultural Regions



Administrative Region Name	Agricultural Region Numbers
Southwest	1, 2, 3
Northwest	4, 5, 6
Central	7, 8
Eastern/Interlake	9, 10, 11, 12

BUCKWHEAT SECTOR



BUCKWHEAT SECTOR PROFILE

Production:

No buckwheat production was recorded in Manitoba prior to 1925 when 9,400 acres produced 97,000 bushels of buckwheat. The seeded area fell to just over 2,000 acres in the late 1940s, but rose to 61,800 acres in 1956. The crop declined in popularity in the next decade, but by 1970, the seeded area had risen to 80,000 acres. The area planted to buckwheat peaked at 135,000 acres in 1979 following the record production of 2.7 million bushels in 1978. Plagued by adverse weather, buckwheat yields declined in the early 1990s and only 15,000 acres were harvested in 1993. Yields improved in 1995 and 1996 to near-record levels of 21.0 and 23.3 bushels per acre respectively. In 2001 and 2002 yields averaged 19.1 and 16.3 bushels per acre, compared to the 10-year average of 16.8 bushels per acre. Recently, competition in the Japanese market from lower-priced Chinese-grown buckwheat discouraged producers from planting larger areas of buckwheat.

Harvested area, production and farm value of the crop in 2002 were 20,000 acres, 325,000 bushels and \$2.3 million respectively, compared to 30,000 acres, 575,000 bushels and \$4.0 million in 2001. Manitoba continues to be the "Buckwheat Capital of Canada" even though only 58 percent of the Canadian crop was produced in the province in 2002 compared to about 77 percent in 2001 and almost 90 percent in 1981. Other buckwheat-producing provinces are Ontario, Quebec and, sometimes, Saskatchewan.

Average buckwheat prices have ranged between \$3.40 and \$8.40 per bushel since 1973. The average price of \$6.99 per bushel for the 2001 crop was up by 3.7 percent from the average price of \$6.74 per bushel the previous year. Prices for the 2002 crop are expected to average close to \$7.20 per bushel.

Marketing:

Manitoba producers deliver buckwheat to cleaning plants, where foreign material is removed and the seed cleaned and graded to export standard. The seed is shipped by truck or rail for export. Small amounts are sold through Winnipeg companies to local consumers.

Processing:

Buckwheat is bagged and sold by companies, such as Agricore United Special Crops in Carman and Keystone Grain Ltd. in Winkler, or ground into whole or coarse buckwheat grits and bagged by W.H. Escott Co. Ltd. in Winnipeg. Vita Health Co. in Winnipeg markets consumer-sized bags of buckwheat flour and hulled buckwheat.

Trade:

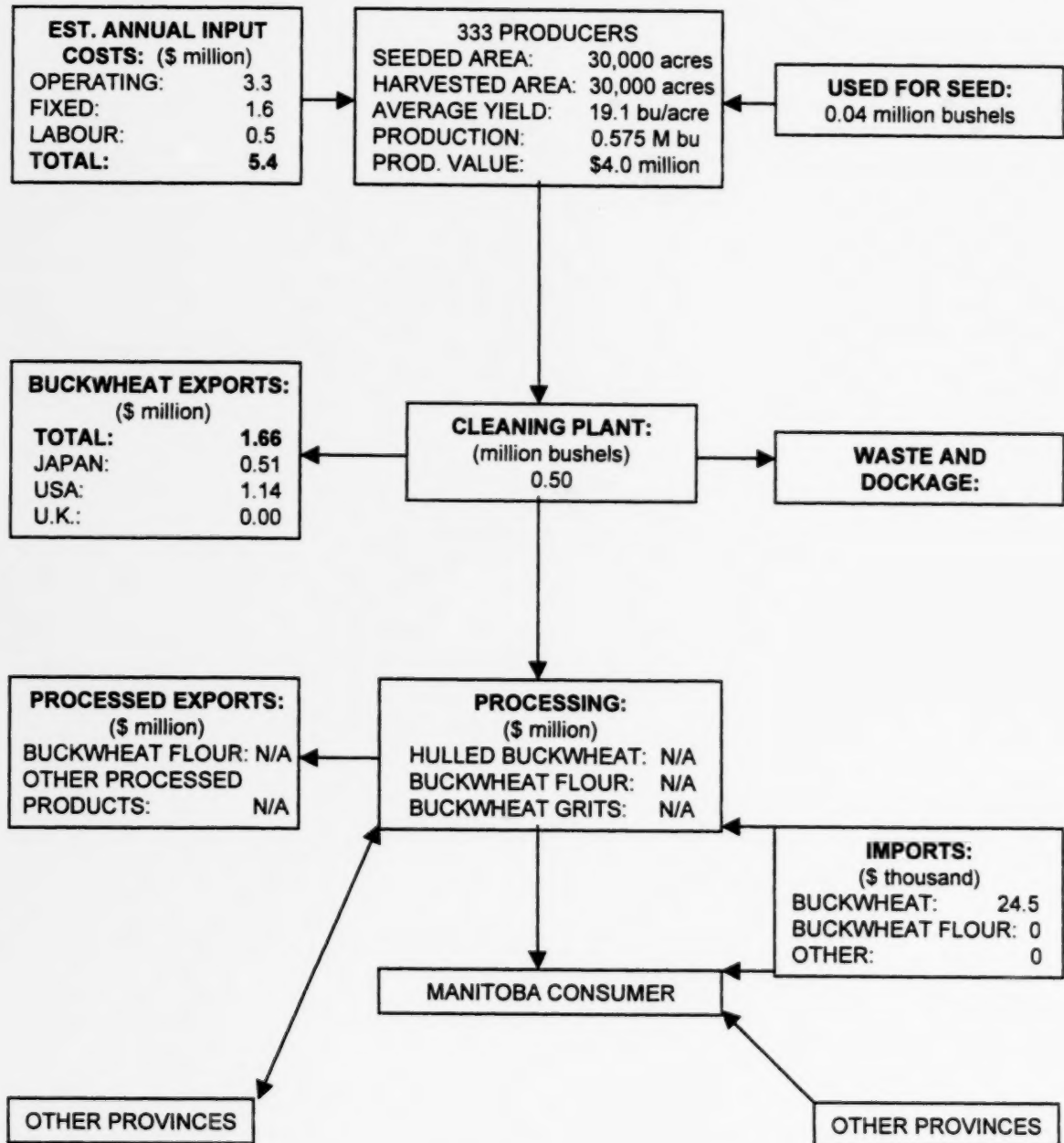
Most of Manitoba's buckwheat exports, valued at \$1.7 million in 2001 and about \$1.1 million in 2002, were shipped to Japan, the United States and United Kingdom. Although Japan bought half of Manitoba's buckwheat exports in 1995 for processing into soba noodles, the Japanese share of buckwheat exports declined to 31 percent in 2001.

Manitoba imported \$24,500 of buckwheat in 2001 and about \$18,000 in 2002, mostly from the United States. Much of this was grown under contract to Manitoba firms.

BUCKWHEAT SECTOR

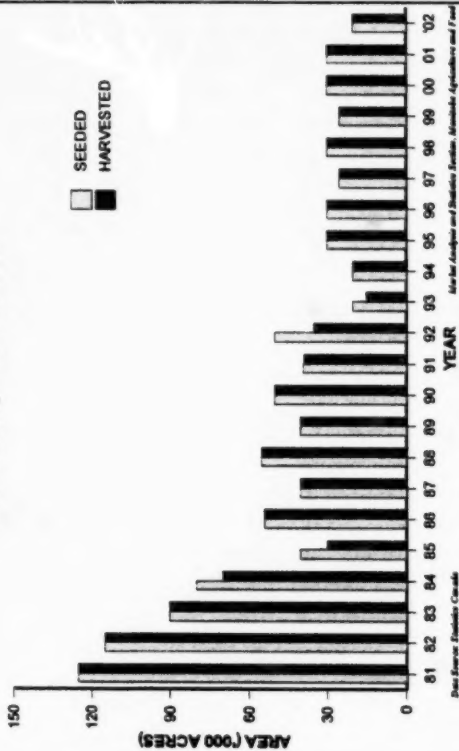
	<u>1998</u>	<u>1999</u>	<u>2000^R</u>	<u>2001^P</u>	<u>2002^P</u>	<u>'02 as a % of '01</u>
Estimated Number of Farms	400	350	400	333	200	60
CROP PRODUCTION:						
Seeded Area ('000 acres):	30	25	30	30	20	67
% of Canada	82.2	72.5	75.9	67.3	66.7	
Harvested Area ('000 acres):	30	25	30	30	20	67
Yield/acre (bushels)	16.7	16.0	15.0	19.1	16.3	85
Production (thousand bu):	500	400	450	575	325	57
% of Canada	73.7	69.6	71.9	76.7	58.2	
Average Price (\$/bu):	7.91	6.55	6.74	6.99	7.20	103
VALUE OF PRODUCTION (\$ million):	4.0	2.6	3.0	4.0	2.3	58
ESTIMATED TOTAL EXPENSES (\$/acre):	164.36	170.03	169.37	179.83	162.97	91
EXPORTS (\$ million):	1.8	2.0	2.5	1.7	1.1	65
Unprocessed	1.8	2.0	2.5	1.7	1.1	65
Processed	0	0	0	0	0	
IMPORTS (\$ thousand):	78.3	58.6	11.0	24.5	18.0	73
Unprocessed	78.3	58.6	11.0	24.5	18.0	73
Processed	0	0	0	0	0	

BUCKWHEAT INDUSTRY CHART, 2001

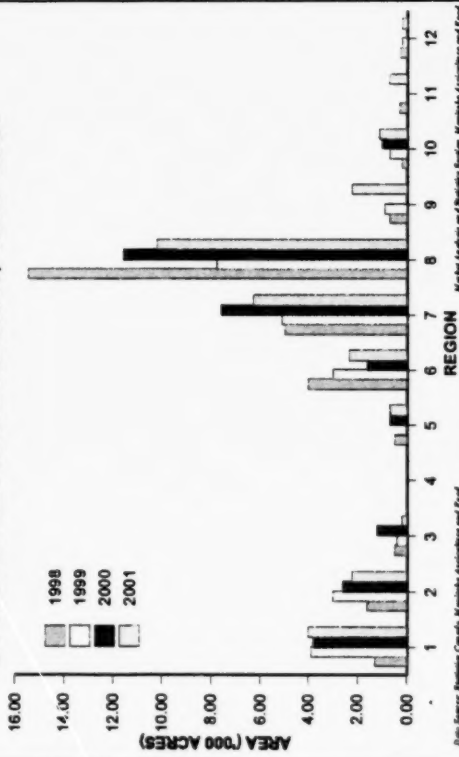


DATA SOURCE: Manitoba Agriculture & Food, Statistics Canada, Agriculture & Agri-Food Canada

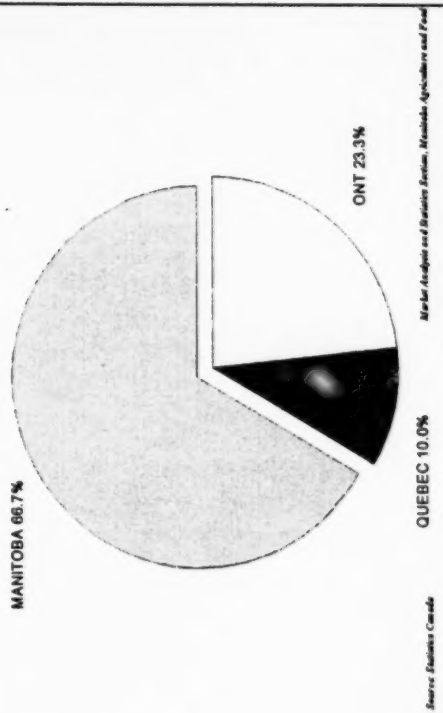
SEEDED & HARVESTED AREA OF BUCKWHEAT BY YEAR, 1981-2002



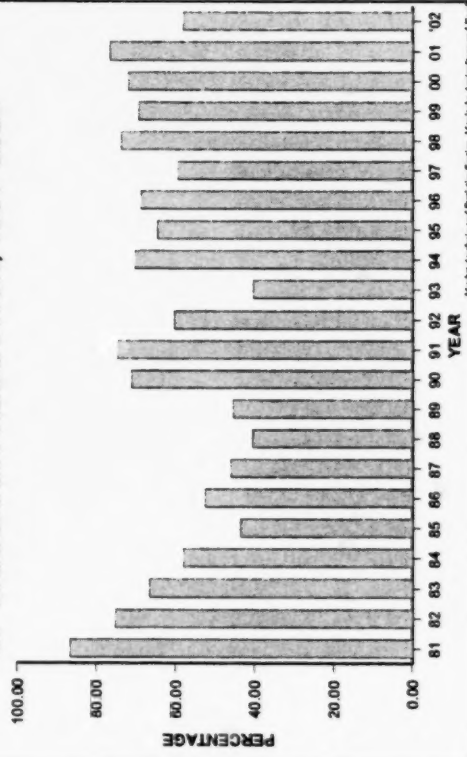
SEEDED AREA OF BUCKWHEAT BY AGRICULTURAL REGION, 1998-2001



AREA OF BUCKWHEAT SEEDED BY PROVINCE, 2002

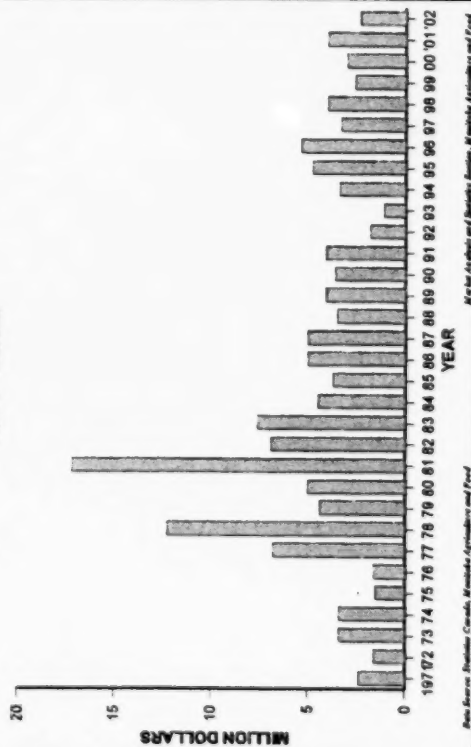


BUCKWHEAT PRODUCTION AS A PERCENTAGE OF CANADIAN PRODUCTION, 1981-2002



FARM VALUE OF BUCKWHEAT PRODUCTION

1971-2002



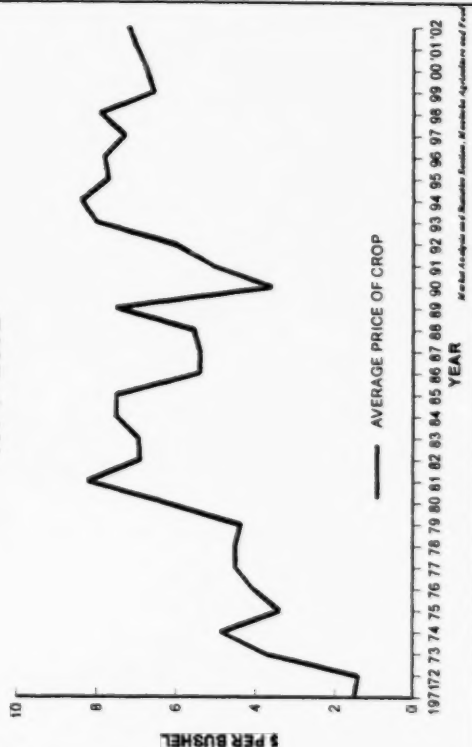
YIELD PER ACRE OF BUCKWHEAT

1971-2002

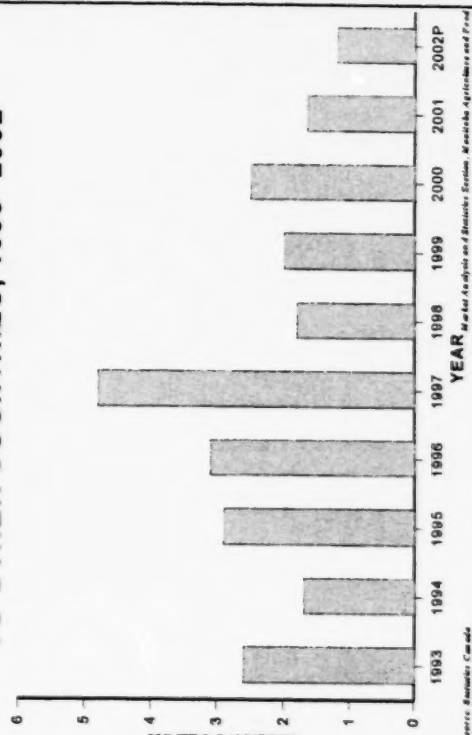


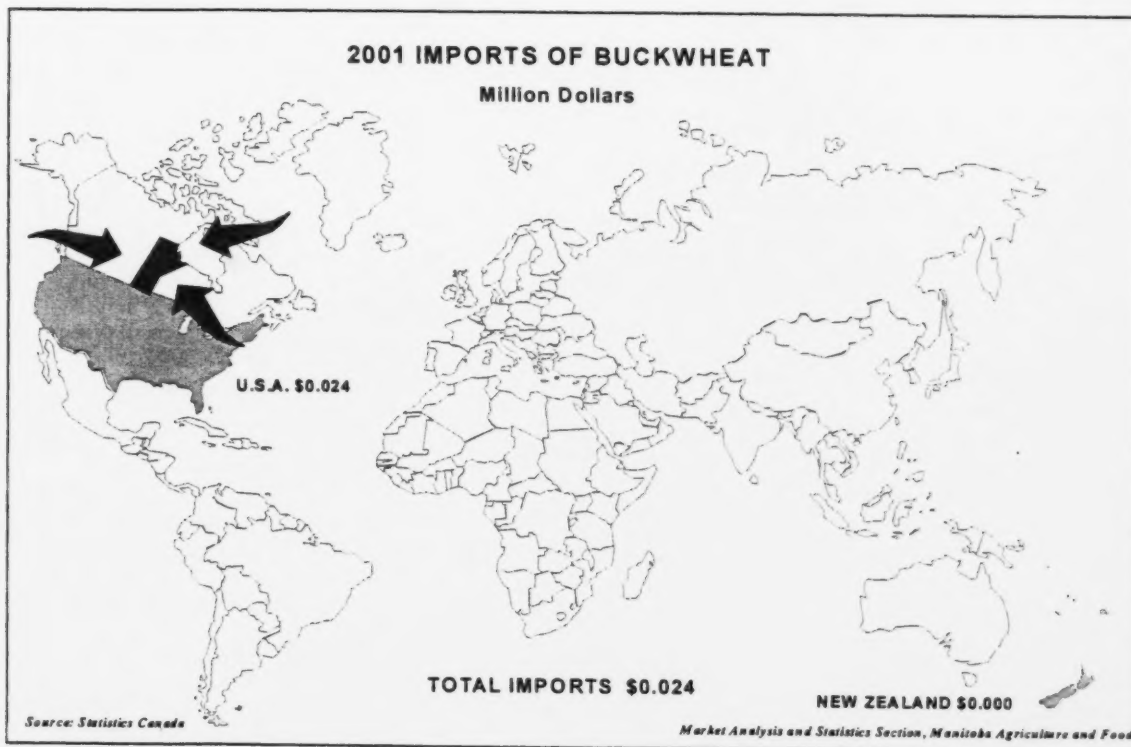
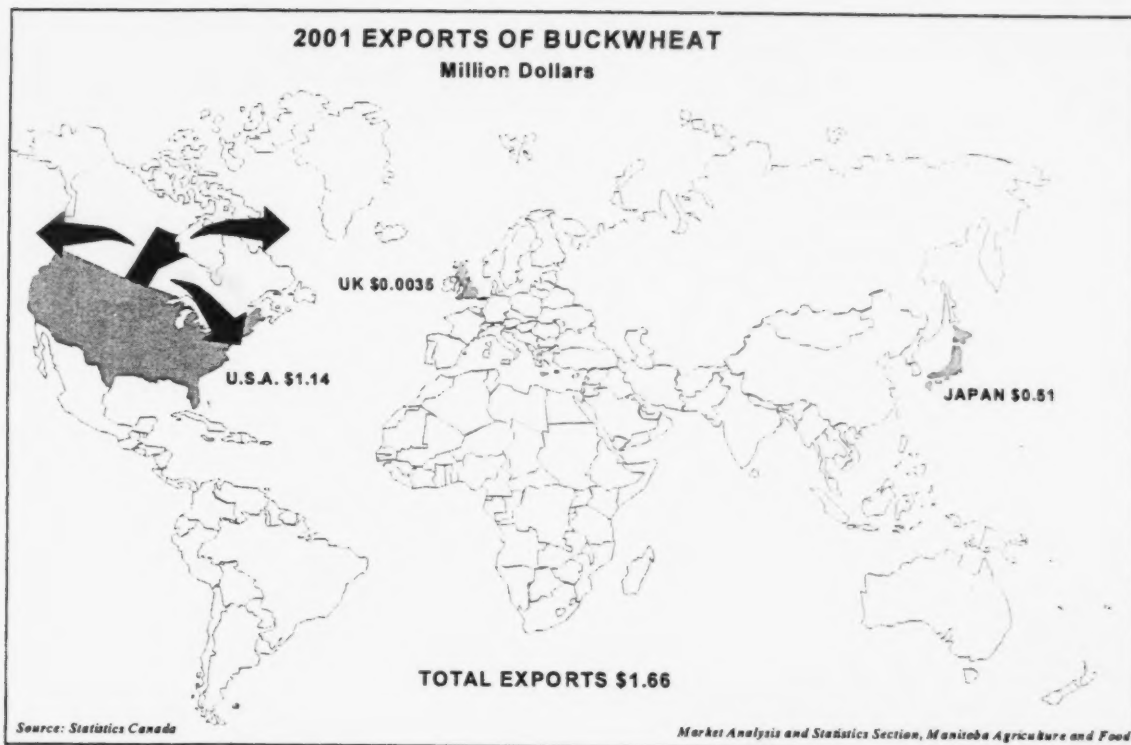
BUCKWHEAT PRICES

1971-2002



MANITOBA BUCKWHEAT EXPORTS TO OTHER COUNTRIES, 1993-2002





CANARY SEED SECTOR



CANARY SEED SECTOR PROFILE

Production:

Canary seed production was first recorded in Manitoba in 1963 when 1,500 acres were harvested and 800,000 pounds produced. The seeded area rose in the 1960s and 1970s, doubling to 15,000 acres from 1976 to 1977. The area planted to canary seed was up to 57,000 acres in 1986, but dropped significantly in 1987 because of low prices. Interest in canary seed production continued to wane until 1993 when only 12,000 acres were seeded, but higher prices in 1994 and 1995 encouraged producers to increase the canary seed area to 30,000 acres in those years. In 1996, the area seeded to canary seed more than doubled to a record 65,000 acres, but declined to 20,000 acres in 1997 and 15,000 acres in 1999 due to the price drop in 1996 and again in 1998. When prices improved, the seeded and harvested area increased over the next three years to a record 70,000 acres in 2002.

Average crop yields ranged from a low of 500 pounds per acre in both 1974 and 2001 to 1,333 pounds per acre in 1990. The average yield in 2002, at 740 pounds per acre, was up by 48 percent from the record low yield in 2001, but was still 23 percent below the 10-year average of 965 pounds per acre.

The 2002 crop of 52.0 million pounds was valued at approximately \$16.7 million, a new record, compared to 25.0 million pounds valued at \$7.6 million in 2001 and a record 74.2 million pounds valued at \$11.1 million in 1996. Manitoba, one of three provinces growing canary seed, produced 14.4 percent of the Canadian crop in 2002, up from 4.6 percent in 1999. The major canary seed-producing province is Saskatchewan with smaller amounts being grown in Alberta.

Average prices for the canary seed crop have ranged between \$0.07 and \$0.32 per pound since 1973. The average price for the 2001 crop was \$0.304 per pound, while the average price for the 2002 crop is expected to be a new record of \$0.32 per pound, in both cases about two and one-half times the 2000 price.

Marketing:

Most of the canary seed is delivered to a cleaning plant in Thunder Bay, where foreign material is removed and the seed cleaned to 98 percent purity (5 percent hulled) for export. The seed is loaded on ships for transportation to Western Europe. Some of the canary seed crop is cleaned by Manitoba plants and shipped directly to the United States and South America. Small amounts are sold to companies in Eastern Canada, from where packaged seed is sent back to Manitoba for the domestic birdseed market.

Processing:

Companies, such as Roy Legumex Inc. in St. Jean-Baptiste and Agricore United clean and bag canary seed. Some canary seed is mixed with other seed and sold as mixed birdseed in Manitoba.

Trade:

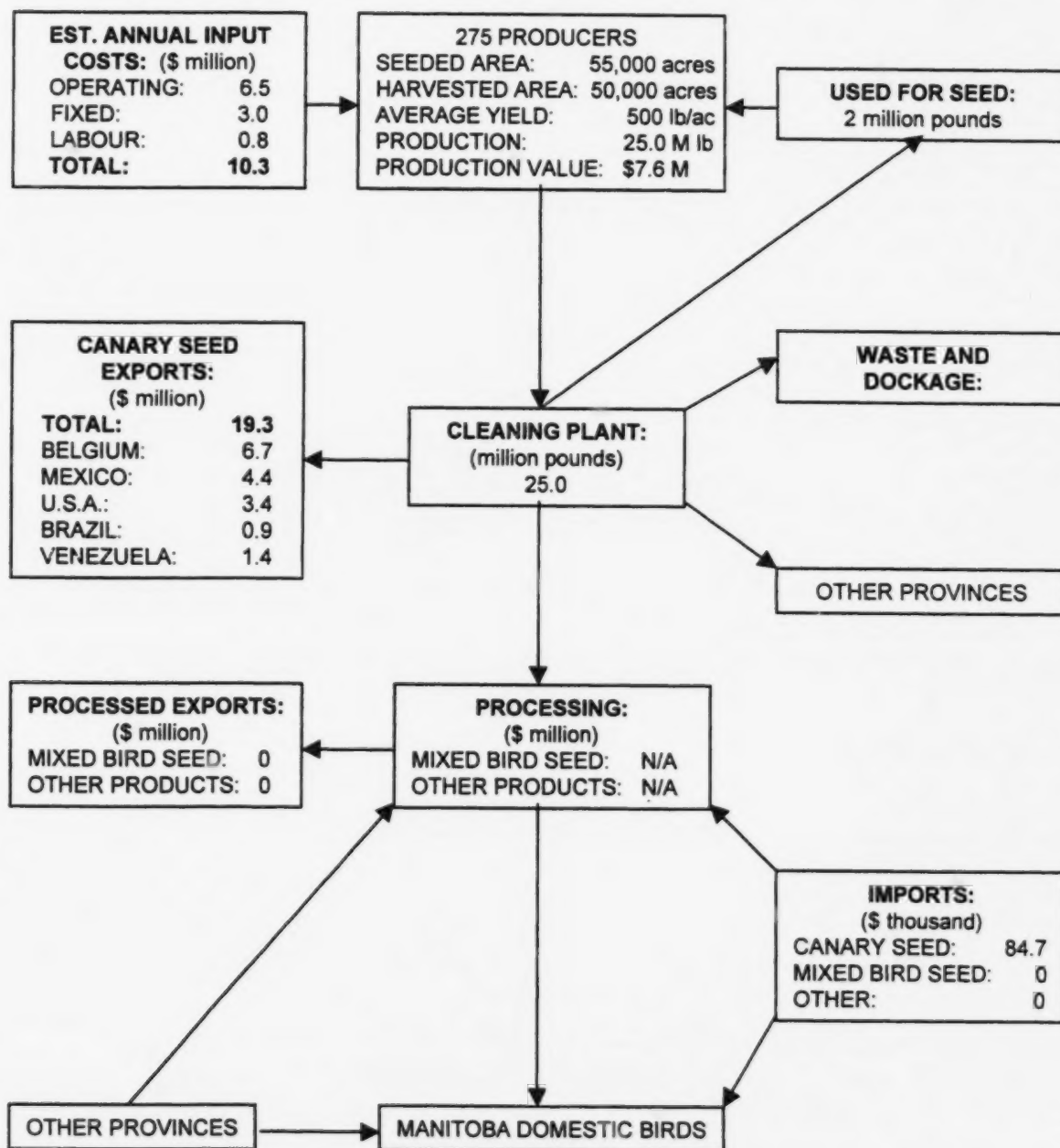
In 2001, Manitoba canary seed valued at \$19.3 million was exported to 36 countries, such as Belgium, Mexico, the United States, Brazil and Venezuela. About 40 percent of Manitoba's exports went to Western Europe in 2001, down from almost two-thirds in 1997.

Manitoba imported a small amount of canary seed from the United States valued at \$84,700 in 2001, but the amount more than tripled in 2002.

CANARY SEED SECTOR

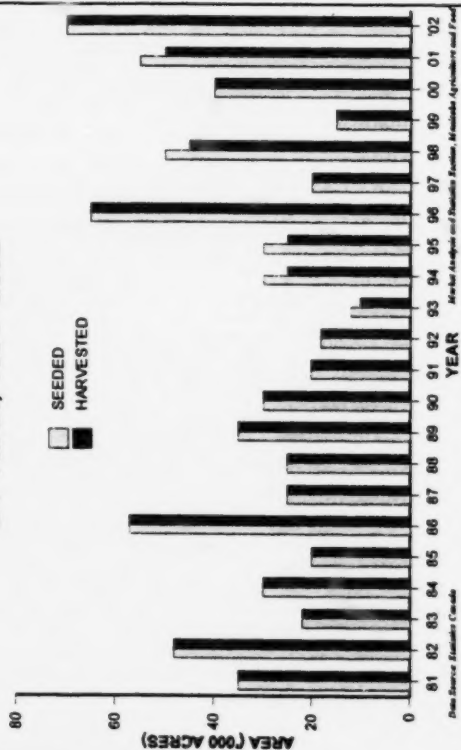
	<u>1998</u>	<u>1999</u>	<u>2000^R</u>	<u>2001^P</u>	<u>2002^P</u>	<u>'02 as a % of '01</u>
Estimated Number of Farms	400	200	400	275	350	127
CROP PRODUCTION:						
Seeded Area ('000 acres):	50.0	15.0	40.0	55.0	70.0	127
% of Canada	9.6	4.1	9.8	13.1	10.3	
Harvested Area ('000 acres):	45.0	15.0	40.0	50.0	70.0	140
Yield/acre (pounds)	1,220	1,120	950	500	740	148
Production (million lb):	54.9	16.8	38.0	25.0	52.0	209
% of Canada	10.6	4.6	10.1	10.0	14.4	
Average Price (\$/lb):	0.116	0.110	0.122	0.304	0.322	106
VALUE OF PRODUCTION (\$ million):	6.40	1.85	4.64	7.60	16.74	220
ESTIMATED TOTAL EXPENSES (\$/acre):	164.82	168.74	168.74	187.13	175.70	94
CASH RECEIPTS (\$ million):	4.0	3.3	2.8	4.7	10.9	232
% of Canada	9.9	8.2	8.1	10.7		
EXPORTS (\$ million):	12.6	14.8	14.4	19.3	20	104
Cleaned Canary Seed	12.6	14.8	14.4	19.3	20	104
Mixed bird seed	0	0	0	0	0	
IMPORTS (\$ thousand):	83.3	47.4	274.1	84.7	270	319
Cleaned Canary Seed	83.3	47.4	274.1	84.7	270	319
Mixed bird seed	0	0	0	0	0	

CANARY SEED INDUSTRY CHART, 2001

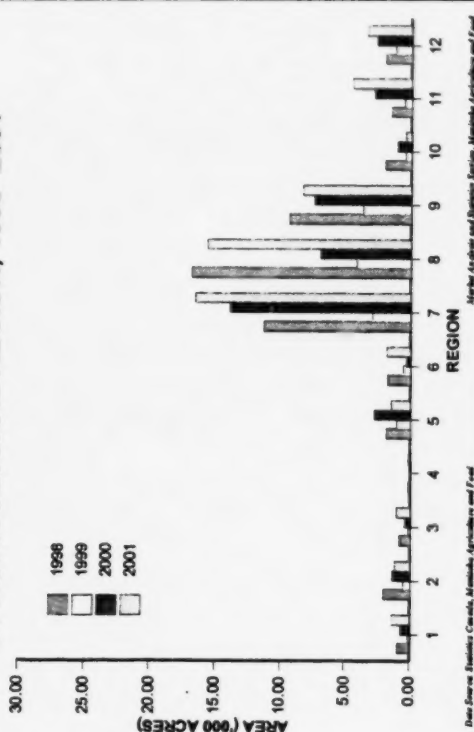


DATA SOURCE: Manitoba Agriculture and Food, Statistics Canada, Agriculture & Agri-Food Canada

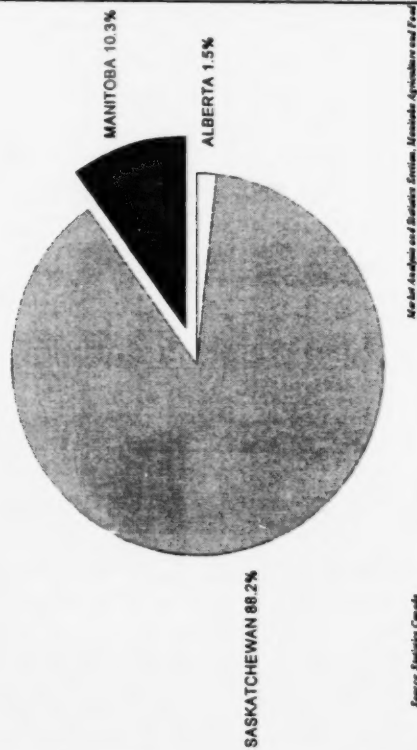
SEEDED & HARVESTED AREA OF CANARY SEED BY YEAR, 1981-2002



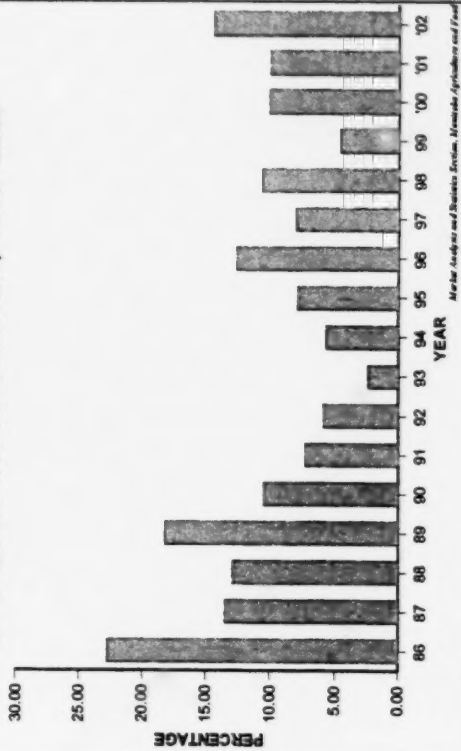
SEEDED AREA OF CANARY SEED BY AGRICULTURAL REGION, 1998-2001



AREA OF CANARY SEED BY PROVINCE, 2002



CANARY SEED PRODUCTION AS A PERCENTAGE OF CANADIAN PRODUCTION, 1986-2002



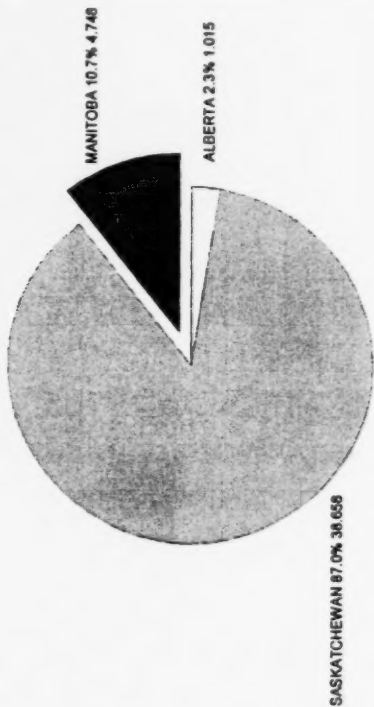
FARM VALUE OF CANARY SEED PRODUCTION

1971- 2002



FARM CASH RECEIPTS FROM CANARY SEED BY PROVINCE, 2001

(MILLION DOLLARS)

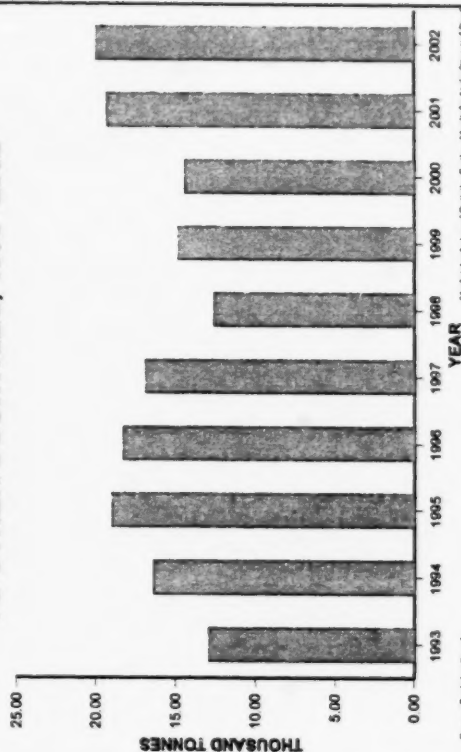


CANARY SEED PRICES

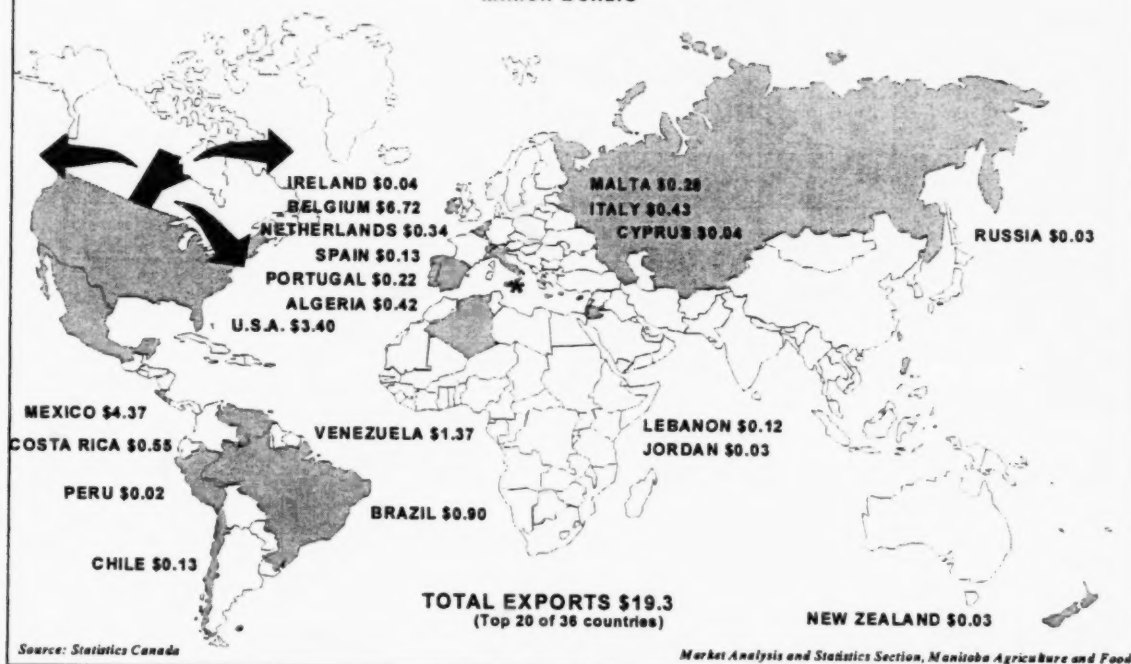
1971- 2002



MANITOBA CANARY SEED EXPORTS TO OTHER COUNTRIES, 1993- 2002



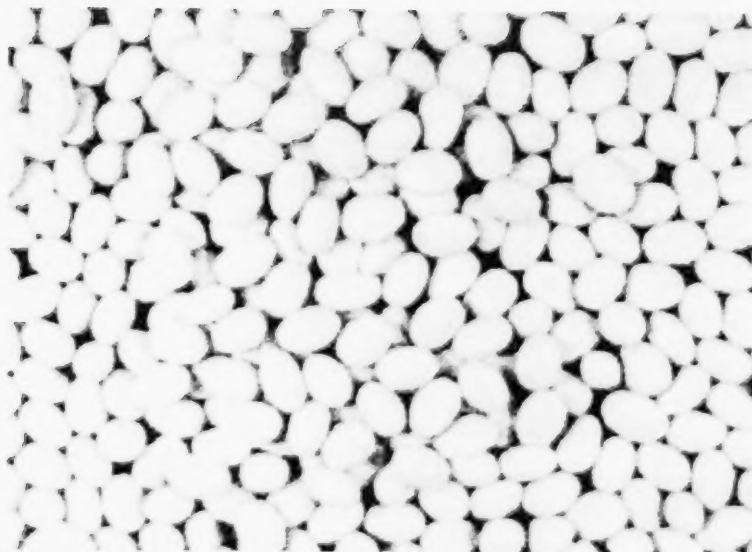
2001 EXPORTS OF CANARY SEED Million Dollars



2001 IMPORTS OF CANARY SEED Million Dollars



DRY BEAN SECTOR



DRY BEAN SECTOR PROFILE

Production:

Commercial production of dry beans began in the mid-1960s in Manitoba with 100 acres seeded and harvested in 1963. By 1981, the seeded area had increased to 19,300 acres with further significant increases occurring in the mid-1990s. There are agronomic benefits to dry bean production as well as net returns, which are at least comparable to wheat production. A record 310,000 acres of dry beans were harvested in 2002, an increase of 32 percent from the previous record in 2001, when the harvested area was 235,000 acres. About 56 percent of the bean area was seeded to white pea/navy beans with most of the remaining area seeded to pinto beans and smaller areas in dark red kidney, cranberry or black beans.

Average dry bean yields reached a record 1,670 pounds per acre in 1994. Yields averaged 1,645 pounds per acre in 2002, up by 9.7 percent from 1,500 pounds per acre in 2001 and the second highest ever. The 10-year average yield was 1,425 pounds per acre.

Production and crop value peaked in 2002 at 510.0 million pounds and an estimated \$97 million respectively, down from 353.0 million pounds and \$106 million in 2001. These were well above the 10-year averages of 200.2 million pounds and \$51.7 million.

Manitoba, the largest producer of dry beans in the country, produced 56.8 percent of the Canadian dry bean crop in 2002, up from 29.7 percent in 1997. About 29 percent of the national dry bean crop is grown in Ontario. Most of the remainder is produced in Alberta with smaller amounts in Quebec. Ontario focuses on white pea beans and coloured beans like Kidney and Cranberry beans, while Alberta grows mainly coloured beans.

Over the last twenty years, average dry bean prices have been in the \$0.15 and \$0.40 per pound range. The average price of \$0.30 per pound for the 2001 crop was up from \$0.19 per pound the previous year, but the price could fall back to an average of \$0.19 per pound in 2002.

Marketing:

Annual farm cash receipts for the sector rose from \$13.6 million in 1996 to \$68.5 million in 2000, but declined to \$37.5 million in 2001. Manitoba's contribution to Canadian dry bean receipts increased from 7.5 percent in 1993 to 40.6 percent in 1999 and 54.8 percent in 2000. The percentage declined to 41.6 in 2001.

In 2001, Manitoba marketed white pea/navy beans (63% of Canadian crop), pinto beans (60% of Canadian area), dark red kidney beans (29%), light red kidney beans (55%), cranberry beans, also called romano, speckled or sugar beans, (16%), small red, red Mexican beans (32%) and black or black turtle beans (75%), all for human consumption.

Processing:

Companies such as Agricore United East, Berdex Canada Ltd., Bison Commodities, Duncan Seeds, Finora Canada Ltd., Global Grain Canada, H & W Seed Service, Keystone Grain, Linear Grain, Northern Sales Ltd., Parent Seeds Ltd., Roy Legumex Inc., R.T. Stow Ltd. and W.G. Thompson & Sons are dry bean crop buyers.

Trade:

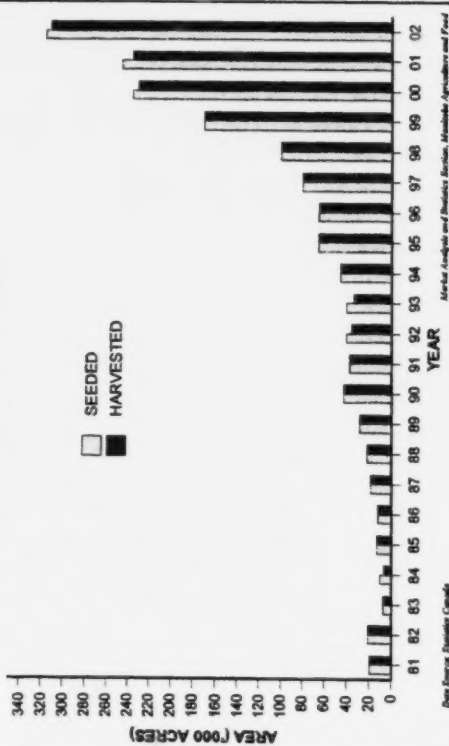
Manitoba's beans may be shipped to canneries in Eastern Canada for processing into products such as soups and pork and beans, but most beans are exported. About \$69 million of the dry beans sold out of province in 2001 were exported to 57 countries such as the United States, Mexico, India, France, Spain, Italy and Venezuela.

Manitoba imported about \$3.9 million of dry beans in 2001, mostly from the U.S. primarily for planting seed.

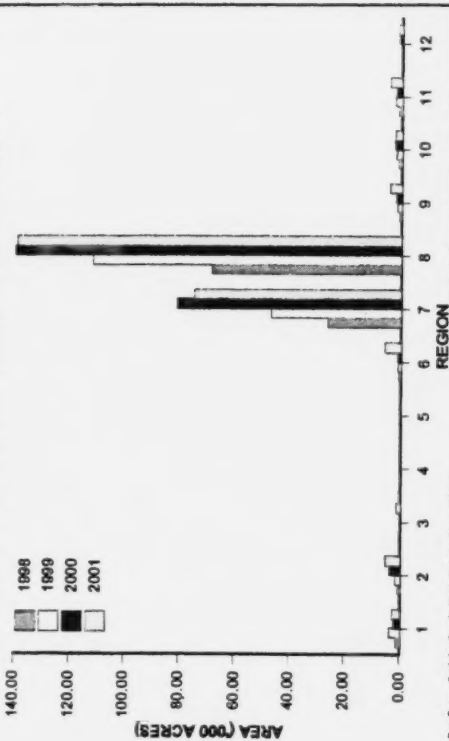
######

######

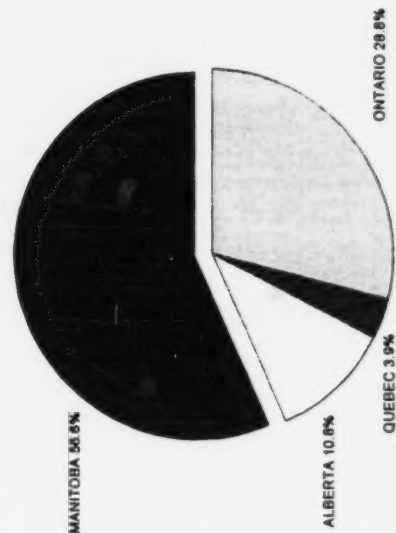
SEEDED & HARVESTED AREA OF DRY BEANS BY YEAR, 1981- 2002



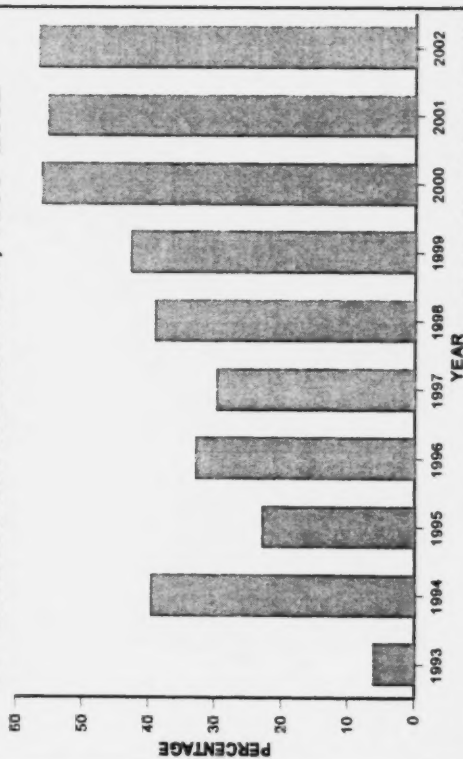
SEEDED AREA OF DRY BEANS BY AGRICULTURAL REGION, 1998- 2001



AREA OF DRY BEANS SEEDED BY PROVINCE, 2002



DRY BEAN PRODUCTION AS A PERCENTAGE OF CANADIAN PRODUCTION, 1993- 2002



FARM VALUE OF DRY BEAN PRODUCTION

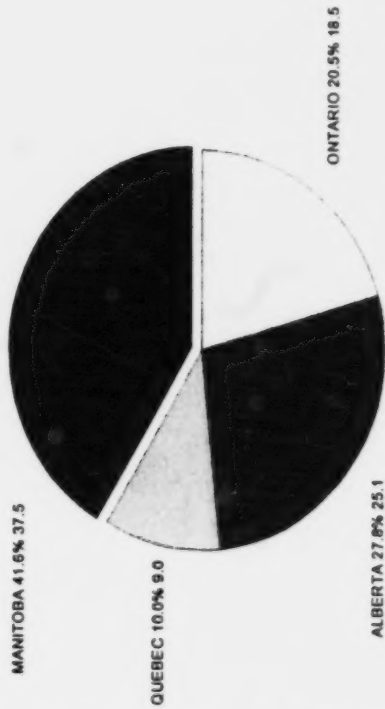
1971- 2002



FARM CASH RECEIPTS FROM DRY BEANS

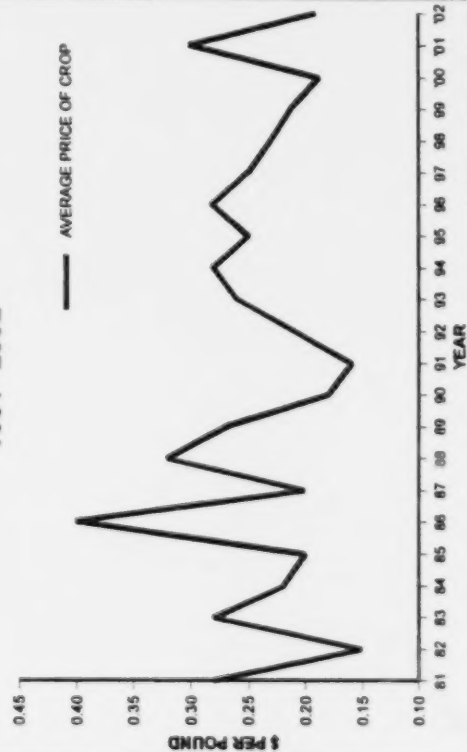
BY PROVINCE, 2001

(MILLION DOLLARS)

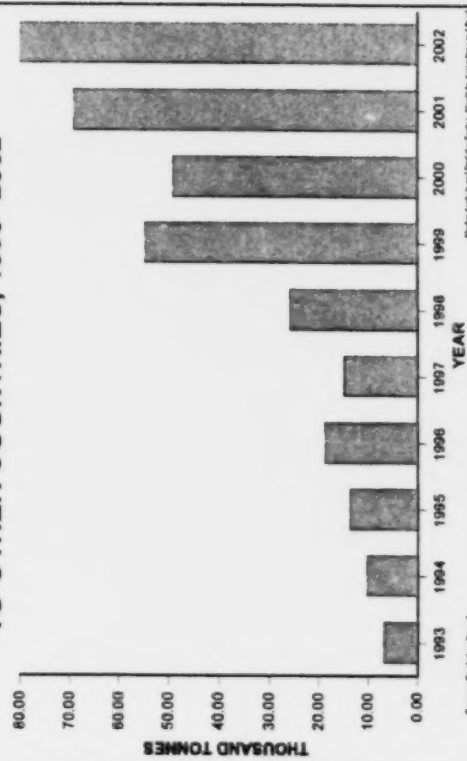


DRY BEAN PRICES

1981- 2002



MANITOBA DRY BEAN EXPORTS TO OTHER COUNTRIES, 1993- 2002



2001 EXPORTS OF DRY BEANS Million Dollars



Source: Statistics Canada

Market Analysis and Statistics Section, Manitoba Agriculture and Food

2001 IMPORTS OF DRY BEANS Million Dollars



Source: Statistics Canada

Market Analysis and Statistics Section, Manitoba Agriculture and Food

DRY PEA SECTOR



DRY PEA SECTOR PROFILE

Production:

Although Manitoba producers grew dry peas between 1908 and 1912, the seeded area was less than 2,000 acres. There was little to no dry pea production during the First World War, but production started again in 1919. Over the past 80 years, the area seeded to peas varied from as low as 500 acres in 1931 to as high as 260,000 acres in 1998.

Harvested area and production of the crop were record high in 1998 with 255,000 acres and 8.3 million bushels respectively, but were at 200,000 acres and 6.5 million bushels in 2002. About 83 percent of Manitoba's 2002 pea plantings were yellow pea varieties, about 14 percent were green varieties with the balance of 3 percent sown to other pea types. Dry pea yields were record high at 39.3 bushels per acre in 2000, but declined to 32.5 bushels per acre in 2002. The 10-year average yield was 32.5 bushels per acre.

Manitoba produced 13 percent of the Western Canadian dry pea crop in 2002, down from 21.6 percent in 1992. There are agronomic benefits to dry pea production. Up until 1998, net returns were at least comparable to wheat production. While the focus in earlier years was on food-quality peas, now much of the crop is used for feed. Peas are not grown in Eastern Canada.

Average dry pea prices have ranged between \$3.67 and \$6.80 per bushel since 1973. The value of dry pea production fell from \$33.2 million in 1998 to \$12.4 million in 1999 as unprofitable prices had discouraged many producers from growing peas. Average prices for the 2001 and 2002 crops rose to \$4.87 and \$5.50 per bushel respectively. Higher prices offset the smaller pea crop in 2001 resulting in a 19 percent rise in production value to \$26.1 million, but the value of the 2002 crop could increase further to a record \$35.8 million.

Marketing:

Manitoba markets primarily yellow peas for food and livestock feed along with smaller amounts of green peas. Annual cash receipts for the sector increased from \$12.2 million in 1993 to \$27.7 million in 1998, fell to \$15 million in 2000, but rose over the next two years to a record \$30 million in 2002. Manitoba's contribution to Canadian dry pea receipts fell from 23.3 percent in 1992 to 6.7 percent in 2001.

Processing:

Peas are cleaned, split and bagged by companies such as AgPro/Saskatchewan Wheat Pool, Agricore United East, Agri-Tel Grain Ltd., Cargill Ltd., Conagra Grain Canada, Finora Canada Ltd., Horizon Agro, Louis Dreyfus Canada Ltd., Northern Sales Ltd., Parent Seeds Ltd., Parrheim Foods, Parrish & Heimbecker, James Richardson International, Prairieland Grain, Prairie Mountain Agri, Roy Legumex Inc., S.S. Johnson Seeds and Tri-Lake Agri.

The main processor of Manitoba peas is Parrheim Foods, a division of Parrish and Heimbecker. The plant at Portage la Prairie produces whole peas, split peas, pea flour, protein, starch and fibre as well as fat replacers. The P. & H. plant in Saskatoon supplies 500 tonnes per year of pea starch and protein for further refining at the Manitoba plant. Best Cooking Pulses, Inc. in Portage la Prairie produce fine and coarse pea hull fibre, while Glenlochar Kitchens in Miniota and Eidse Family Farms in Morris produce consumer packages of soup mixes, which use peas.

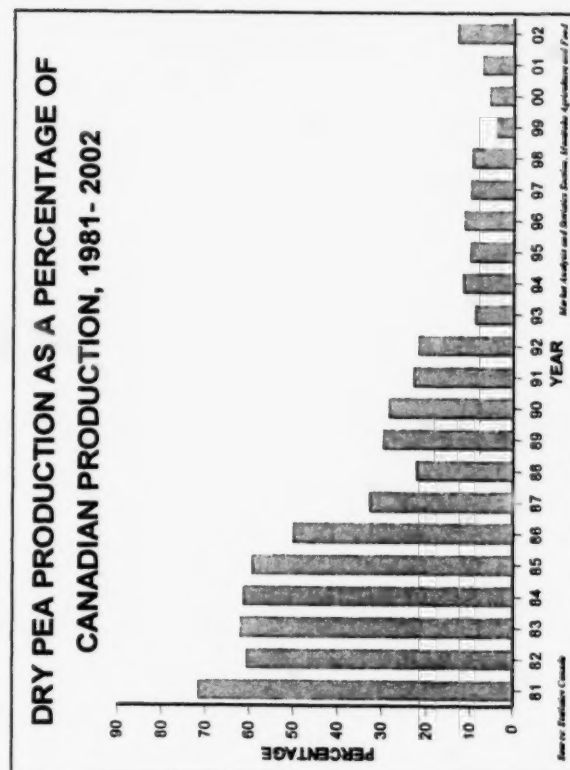
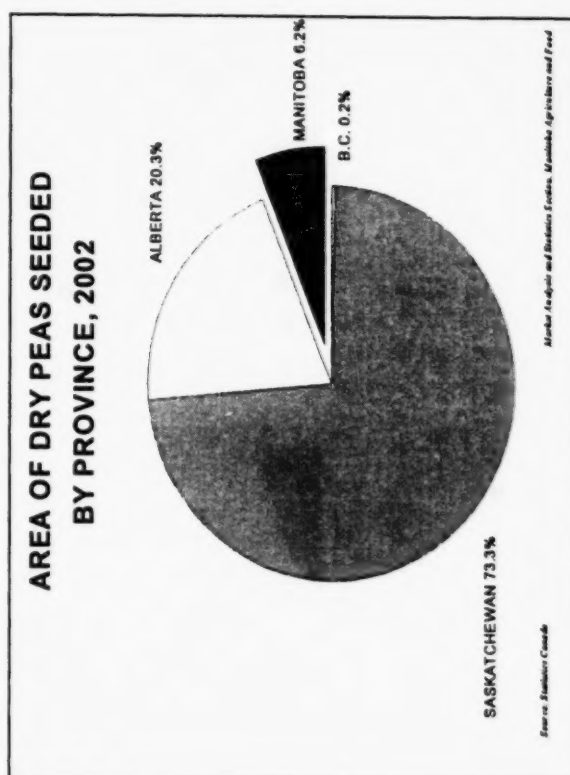
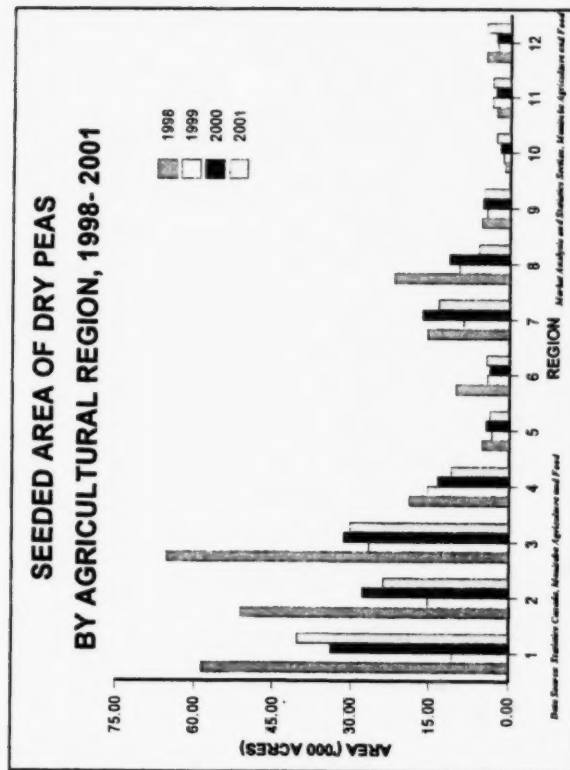
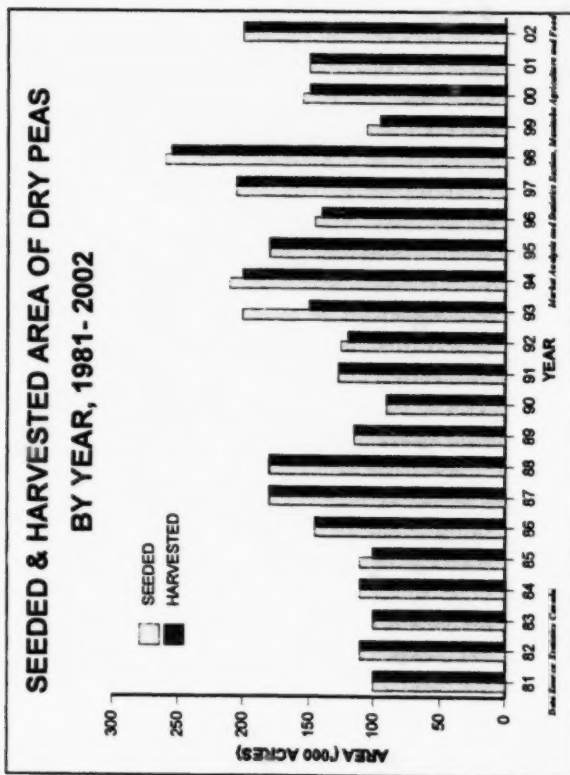
Peas are used in hog rations as an alternative protein source to soy and canola meal.

Trade:

Some of Manitoba's food-quality peas may be shipped to canneries in Eastern Canada, but most of the food pea exports are shipped to 54 countries such as India, Spain, Belgium, the United States and Ireland. Dry pea exports amounted to \$68.2 million in 2001. Small amounts of pea flour are exported to countries such as the USA, the United Kingdom and Germany. Manitoba imported about \$1.7 million of split peas in 2001, mostly from the USA.

DRY PEAS AND DRY PEA PRODUCTS SECTOR

	<u>1998</u>	<u>1999</u>	<u>2000^R</u>	<u>2001^P</u>	<u>2002^P</u>	<u>'02 as a % of '01</u>
Estimated Number of Farms	1,200	900	1,000	740	800	108
CROP PRODUCTION:						
Seeded Area ('000 acres):	260	105	155	150	200	133
% of Canada	9.7	5.0	5.1	4.5	6.2	
Harvested Area ('000 acres):	255	95	150	150	200	133
Yield/acre (bushels)	32.5	35.6	39.3	35.8	32.5	92
Production (million bu):	8.3	3.4	5.9	5.4	6.5	121
% of Canada	9.7	4.1	5.6	7.2	13.0	
Average Price (\$/bu):	4.00	3.67	3.73	4.87	5.50	113
VALUE OF PRODUCTION (\$ million):	33.2	12.4	22.0	26.1	35.8	137
ESTIMATED TOTAL EXPENSES (\$/acre):	211.80	195.42	177.82	178.40	172.00	96
CASH RECEIPTS (\$ million):	27.7	16.2	14.9	21.8	29.6	136
% of Canada	10.1	6.2	5.5	6.7		
CROP DISPOSITION (million bu):	8.5	3.8	6.1	5.6	6.7	120
Marketings	6.2	2.7	4.7	4.3	5.1	119
Seed Requirements	0.2	0.4	0.4	0.5	0.6	120
Feed, Waste & Dockage	1.6	0.4	0.8	0.7	0.7	100
Carryover, July 31	0.4	0.2	0.3	0.2	0.3	150
EXPORTS (\$ million):	47.6	37.0	44.8	68.6	50	73
Dry, shelled peas	47.3	36.7	44.4	68.2	48.5	71
Pea meal, flour, etc.	0.2	0.4	0.4	0.5	1.5	300
IMPORTS (\$ million):	0.63	0.60	0.56	1.69	0.7	41
Dry, shelled peas	0.63	0.59	0.54	1.69	0.7	41
Pea meal, flour, etc.	0.0	0.01	0.02	0.0	0.0	



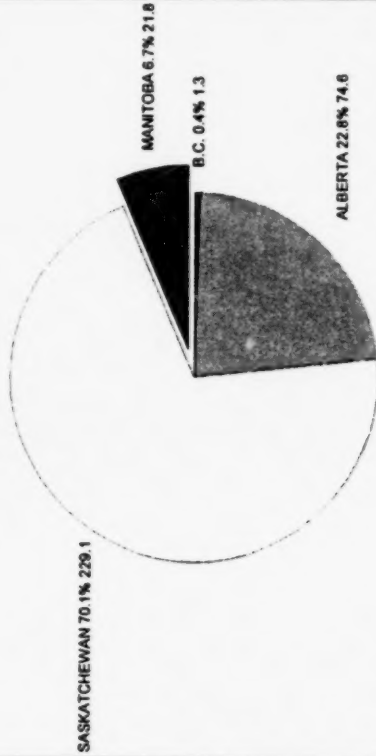
FARM VALUE OF DRY PEA PRODUCTION

1971-2002



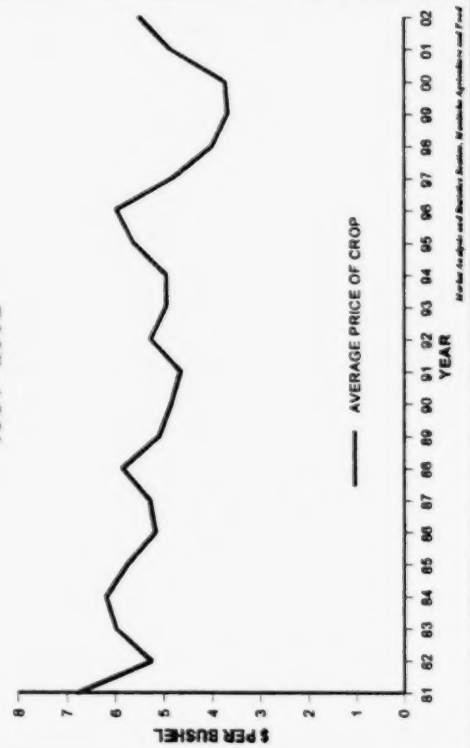
FARM CASH RECEIPTS FROM DRY PEAS BY PROVINCE, 2001

(MILLION DOLLARS)

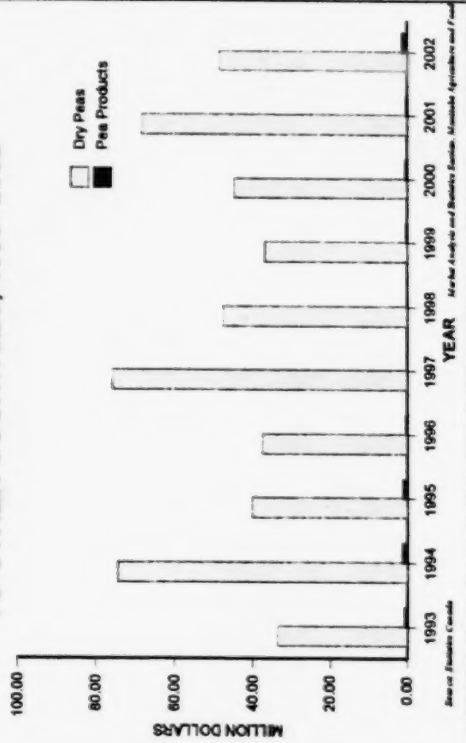


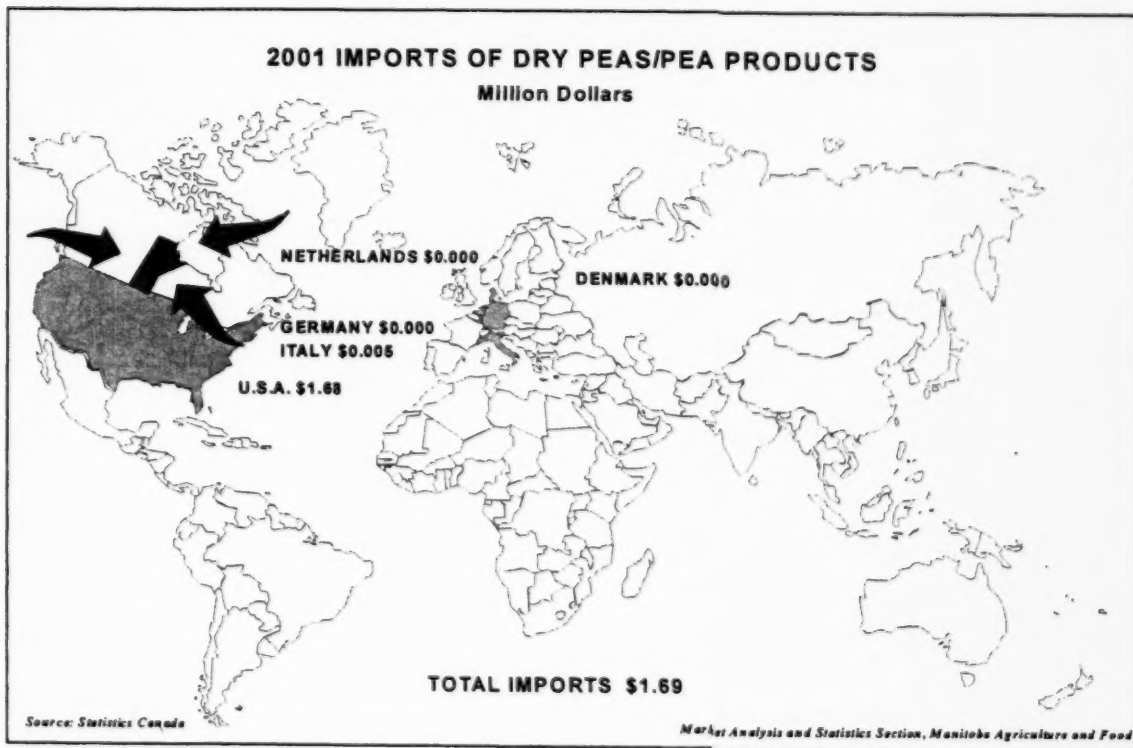
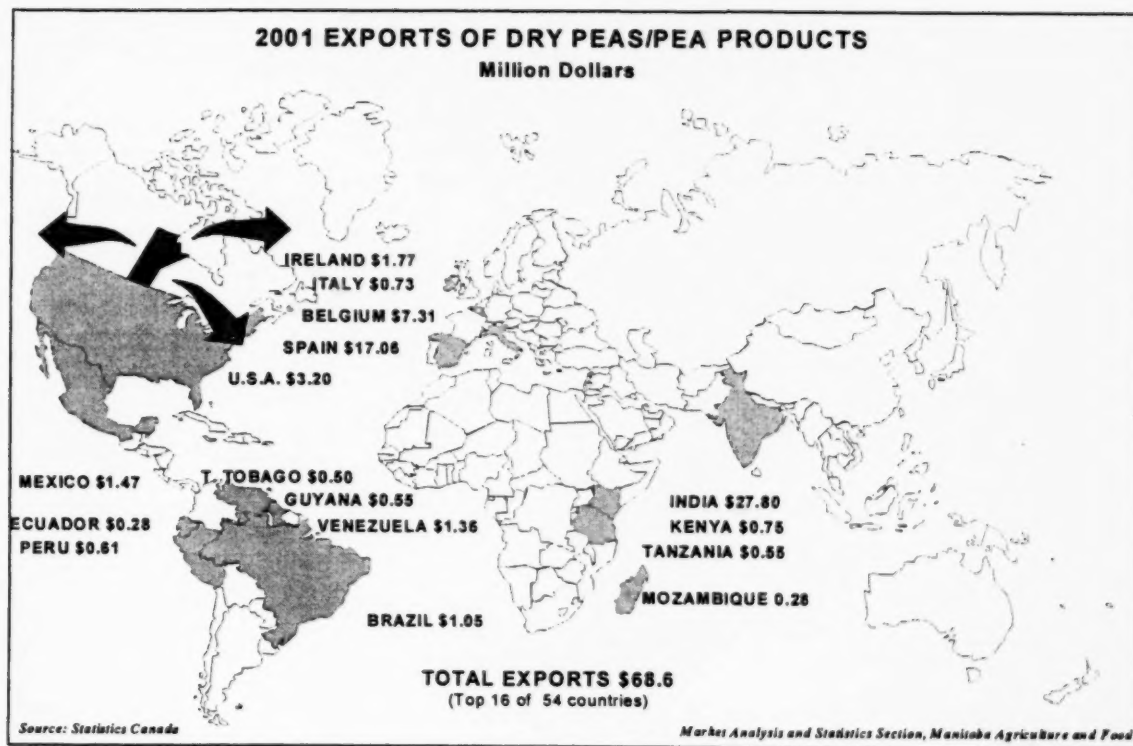
DRY PEA PRICES

1981-2002



MANITOBA DRY PEA AND PRODUCT EXPORTS TO OTHER COUNTRIES, 1993-2002





FABABEAN SECTOR



FABABEAN SECTOR PROFILE

Production:

As a legume, fababeans (also known as horse beans or favabeans) are important in crop rotation. Fababeans are well adapted to clay or clay loam soils with good moisture, providing surface drainage is effective.

Commercial production of fababeans began in the early 1970s in Manitoba with 2,000 acres seeded and harvested in 1972. By 1980, the seeded area had increased to a record 22,000 acres, but the area dropped significantly in the 1980s and 1990s. However, production peaked at 38.4 million pounds in 1987 from an area of 16,000 acres. About 10,000 acres of fababeans were seeded and harvested in 2001, producing 17.5 million pounds of beans. The area remained at 10,000 acres in 2002, but production increased to 18.5 million pounds. Most of Manitoba's fababean production takes place in the south-central area of the province. Manitoba had 77 percent of the seeded and harvested area in Canada in 2001 and 2002, whereas Alberta had 23 percent.

Average fababean yields were record high at 2,700 pounds per acre in 1996, but were at a 30-year low of 800 pounds per acre in 1974 and 1989. Yields rose to 1,850 pounds per acre in 2002, up from 1,750 pounds per acre in 2001. This was 7.5 percent below the 10-year average of 2,000 pounds per acre.

Manitoba produced close to 93 percent of the Canadian fababean crop in 2002, well above the 77 percent share in 2001. All commercial fababean production takes place on the Prairies with 22.5 and 7 percent produced in Alberta in 2001 and 2002 respectively and small quantities in Saskatchewan. There are almost no fababeans produced in Eastern Canada.

Over the last thirty years, average fababean prices in Manitoba have ranged between \$0.055 and \$0.103 per pound. The average price of \$0.08 per pound for the 2001 crop was up by 1.3 percent from the previous year. Farm value of the crop peaked in 2000 at \$2.69 million. The value of the 2001 crop was \$1.42 million, but is expected to rise to \$1.55 million for the 2002 crop.

Marketing:

Fababeans are a protein-rich food for human consumption with large beans being cooked whole and smaller beans ground into meal or paste. Downgraded product is used for livestock feed. Some fababeans are harvested as high-quality forage or silage.

Processing:

Cleaning and bagging of fababeans are done by companies, such as Roy Legumex Inc. There is minimal further processing of fababeans in Manitoba.

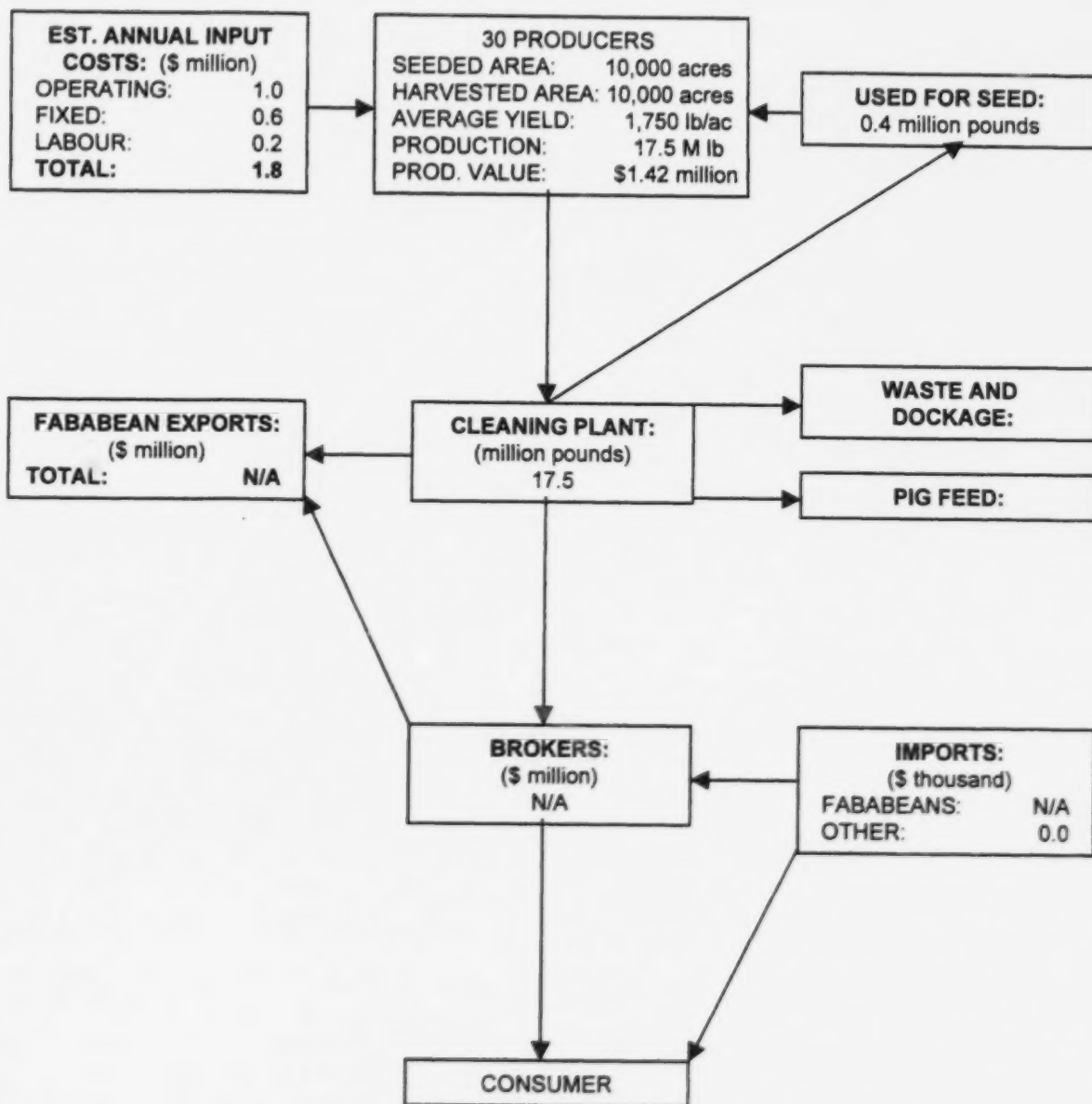
Trade:

Some of Manitoba's fababeans may be sold to Eastern Canada, but most out-of-province shipments are to the Middle East, where the beans have been grown for many centuries and are considered a dietary staple, used as a cereal, meat or dairy product substitute.

FABABEANS SECTOR

	<u>1998</u>	<u>1999</u>	<u>2000^R</u>	<u>2001^P</u>	<u>2002^P</u>	<u>'02 as a % of '01</u>
Estimated Number of Farms	N/A	N/A	N/A	30	30	100
CROP PRODUCTION:						
Seeded Area ('000 acres):	10.0	7.0	15.0	10.0	10.0	100
% of Canada	N/A	N/A	N/A	77	77	
Harvested Area ('000 acres):	10.0	6.9	15.0	10.0	10.0	100
Yield/acre (pounds):	2,270	2,070	2,270	1,750	1,850	106
Production ('000 pounds):	22,800	14,400	34,000	17,500	18,500	106
% of Canada	75.2	100	100	77.4	92.5	
Average Price (\$/pound):	0.082	0.075	0.079	0.080	0.084	105
VALUE OF PRODUCTION (\$ million):	1.87	1.08	2.69	1.42	1.55	109
ESTIMATED TOTAL EXPENSES (\$/acre):	N/A	N/A	177.82	178.40	172.00	96

FABABEANS INDUSTRY CHART, 2001



DATA SOURCE: Manitoba Agriculture and Food, Statistics Canada, Agriculture & Agri-Food Canada

SEED & HARVESTED AREA OF FABABEANS BY YEAR, 1972-2002



FABABEAN PRICES 1972-2002



AREA OF FABABEANS SEED BY PROVINCE, 2001



FARM VALUE OF FABABEAN PRODUCTION 1972-2002



LENTIL SECTOR



LENTIL SECTOR PROFILE

Production:

Commercial production of lentils began in the early 1970s in Manitoba with 2,500 acres seeded and harvested in 1972. By 1979, the seeded area had increased to 17,100 acres with further significant increases occurring in the 1990s. As a legume, lentils are important in crop rotation. A record 155,000 acres of lentils were seeded and harvested in 1992 and produced 175 million pounds of lentils. Uncompetitive prices led to reduced interest in lentil production and the seeded area fell to 8,000 acres in 1997. Prices improved in 1999, which led to 35,000 acres of lentils being seeded in 2000. Almost all of Manitoba's lentil plantings were to the small lentils (Eston) with yellow cotyledon (colour showing when split in half) with the remainder seeded to the larger yellow type (Laird) lentils. In response to lower prices, the lentil area decreased to 10,000 acres in 2001, of which 6,000 acres was harvested. No lentils were reported planted in 2002.

Average lentil yields were record high at 1,527 pounds per acre in 1990, but fell to a 12-year low of 665 pounds per acre in 1993. Yields rose to 1,250 pounds per acre in 2001, 16 percent above the yield of 1,076 pounds per acre in 2000 and 11 percent above the 10-year average of 1,125 pounds per acre. Lentil production fell to 7.5 million pounds in 2001, well below 35.5 million pounds in 2000.

Manitoba produced about 0.6 percent of the Canadian lentil crop in 2001, down from 22.7 percent in 1992. All commercial lentil production takes place on the Prairies with over 98 percent in Saskatchewan. There are almost no lentils produced in Eastern Canada.

Over the last thirty years, average lentil prices have ranged between \$0.05 and \$0.35 per pound. The average price of \$0.12 per pound for the 2001 crop was down by 14 percent from the previous year. Farm value of the crop peaked in 1992 at \$23.4 million. The value of the 2001 crop was \$0.9 million, down from \$5.0 million in 2000.

Marketing:

Annual farm cash receipts for the sector rose from \$10.0 million in 1994 to \$12.4 million in 1995, but were \$2.5 million in 2001. Manitoba's contribution to Canadian lentil receipts decreased from 10.0 percent in 1994 to 1.3 percent in 2001.

Lentils are a protein-rich food for human consumption, but downgraded product could be used for livestock feed.

Processing:

Cleaning and bagging of lentils are done by companies such as AgPro/Saskatchewan Wheat Pool, Agricore United East, Berdex Canada Ltd., Finora Canada Ltd., Horizon Agro, Northern Sales Ltd., Parent Seeds Ltd., Prairieland Grain, Roy Legumex Inc. and S.S. Johnson Seeds. There is little further processing of lentils, but companies such as Glenlochar Kitchens in Miniota and Eidse Family Farms in Morris mix lentils with other legumes and rice for sale as soup and stew bases.

Trade:

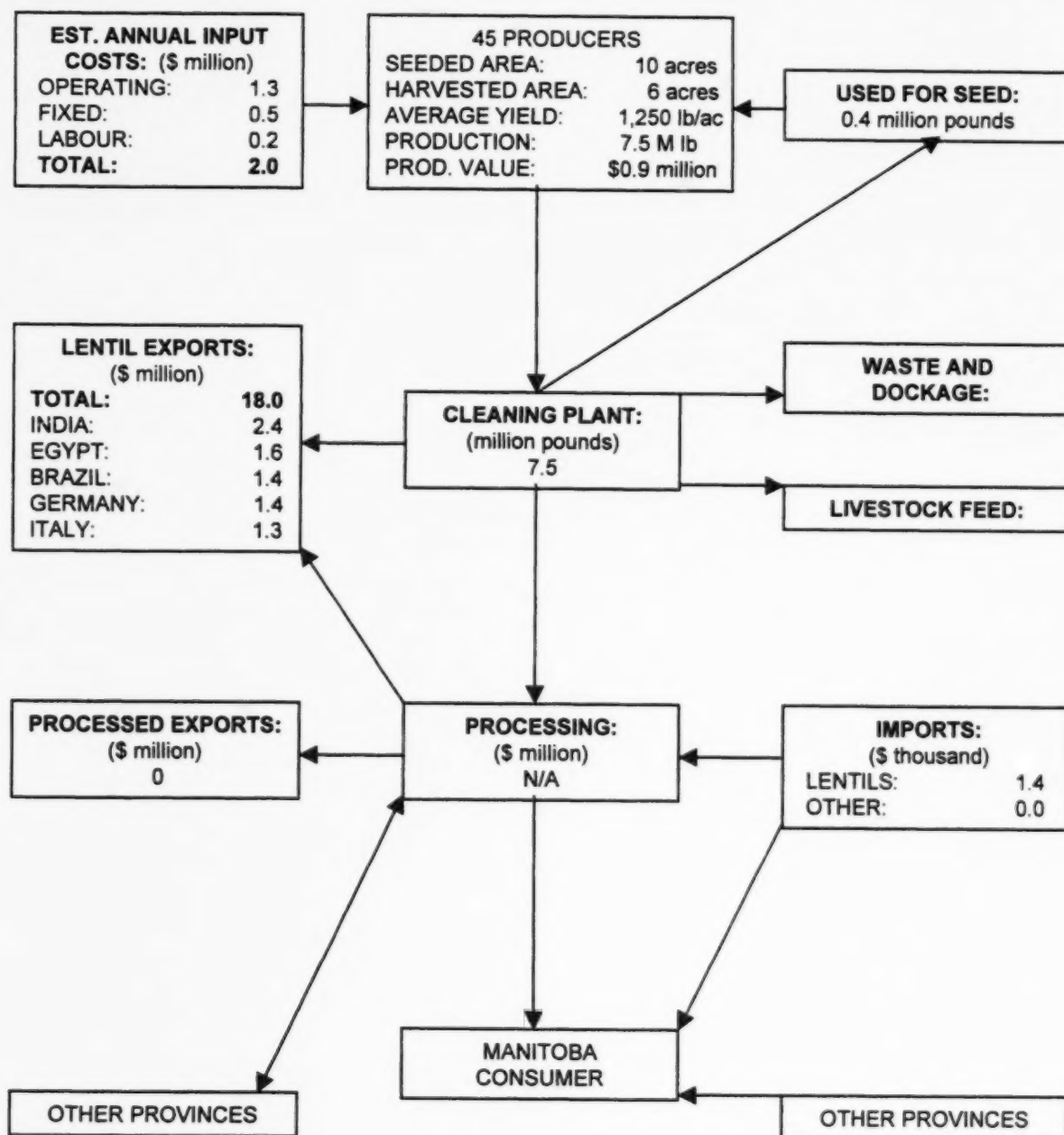
Some of Manitoba's lentils may be shipped to Eastern Canada and Manitoba's exports could include product from Saskatchewan. Almost \$18.0 million of lentils were exported to 47 countries in 2001, including India, Brazil, Italy, Germany and Egypt. Lentil exports could decline to \$16 million in 2002.

Manitoba imported only about \$1,400 of lentils from the United States in 2001, but lentil imports could be worth close to \$80,000 in 2002.

LENTIL SECTOR

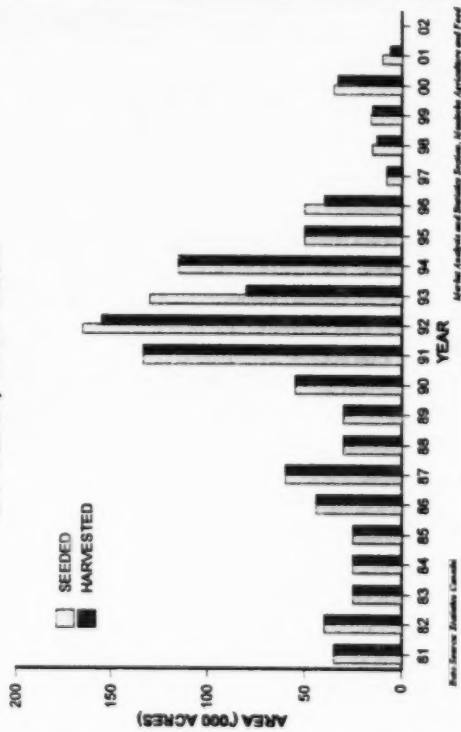
	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002^P</u>	<u>'02 as a % of '01</u>
Estimated Number of Farms	40	40	65	45	0	
CROP PRODUCTION:						
Seeded Area ('000 acres):	15	16	35	10	0	
% of Canada	1.6	1.3	2.0	0.6		
Harvested Area ('000 acres):	13	15	33	6	0	
Yield/acre (pounds):	992	1,292	1,076	1,250	0	
Production (million pounds):	13.0	19.4	35.5	7.5	0	
% of Canada	1.2	1.2	1.8	0.6	0	
Average Price (\$/pound):	0.145	0.186	0.140	0.120		
VALUE OF PRODUCTION (\$ million):	1.9	3.6	5.0	0.9	0	
ESTIMATED TOTAL EXPENSES (\$/acre):	178.69	171.96	198.25	203.21	215.88	106
CASH RECEIPTS (\$ million):	2.4	2.7	3.9	2.5	0.4	16
% of Canada	2.0	1.4	1.6	1.3		
EXPORTS (\$ million):	20.6	25.0	24.4	18.0	16	90
Shelled lentils	20.6	25.0	24.4	18.0	16	90
IMPORTS (\$ thousand):	123.6	133.4	8.4	1.4	80	5700
Shelled lentils	123.6	133.4	8.4	1.4	80	5700

LENTIL INDUSTRY CHART, 2001

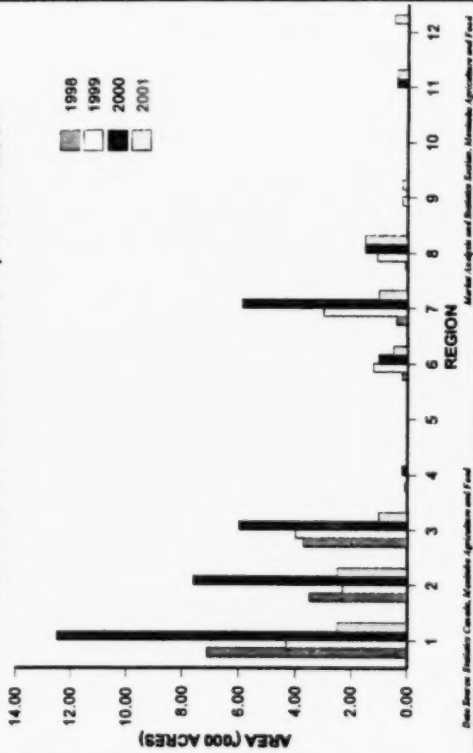


DATA SOURCE: Manitoba Agriculture and Food, Statistics Canada, Agriculture & Agri-Food Canada

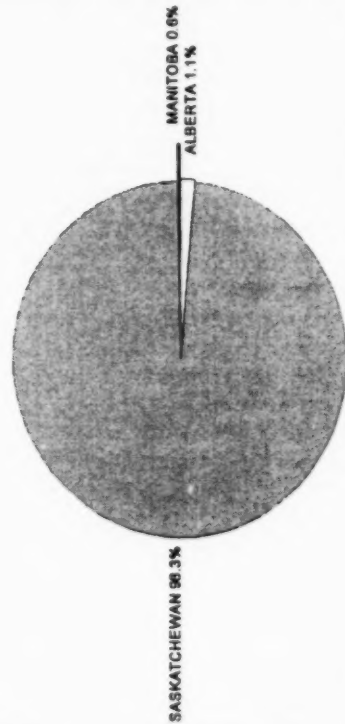
SEEDED & HARVESTED AREA OF LENTILS BY YEAR, 1981-2002



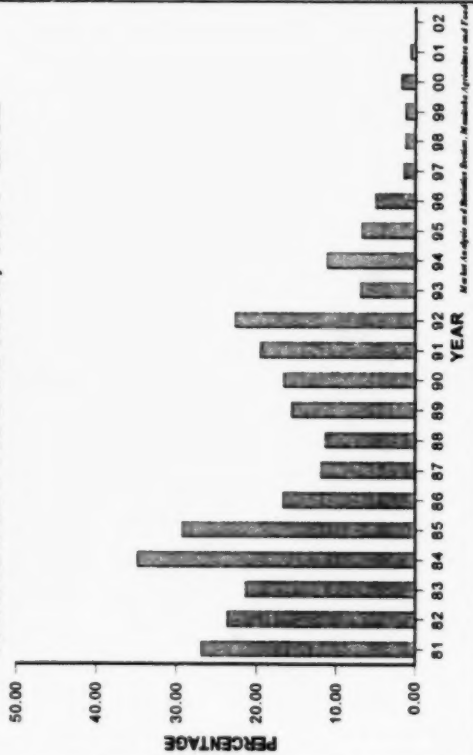
SEEDED AREA OF LENTILS BY AGRICULTURAL REGION, 1998-2001

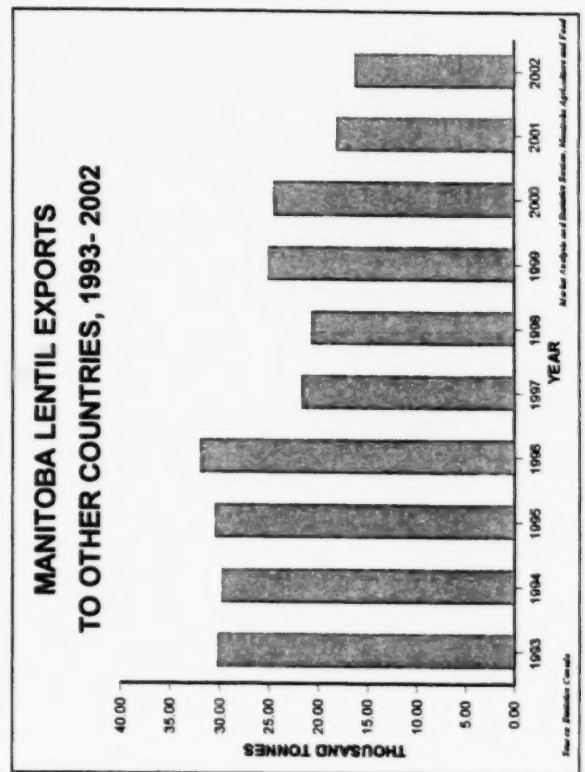
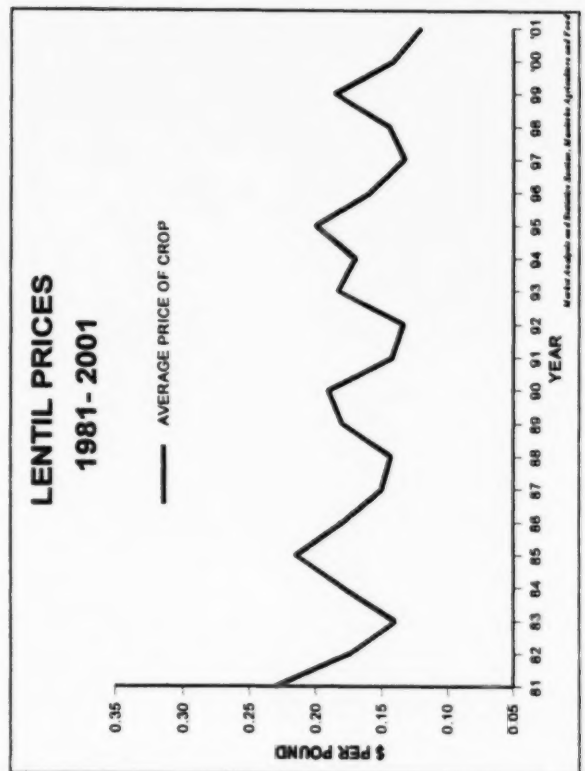
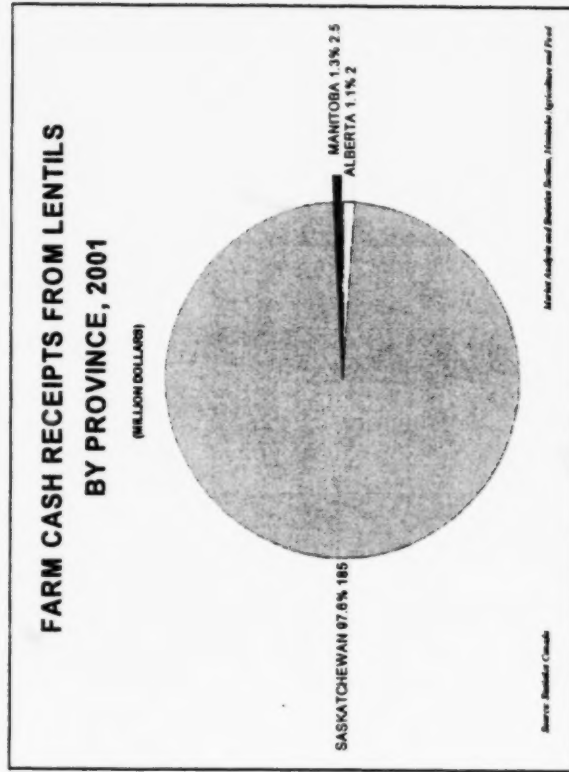
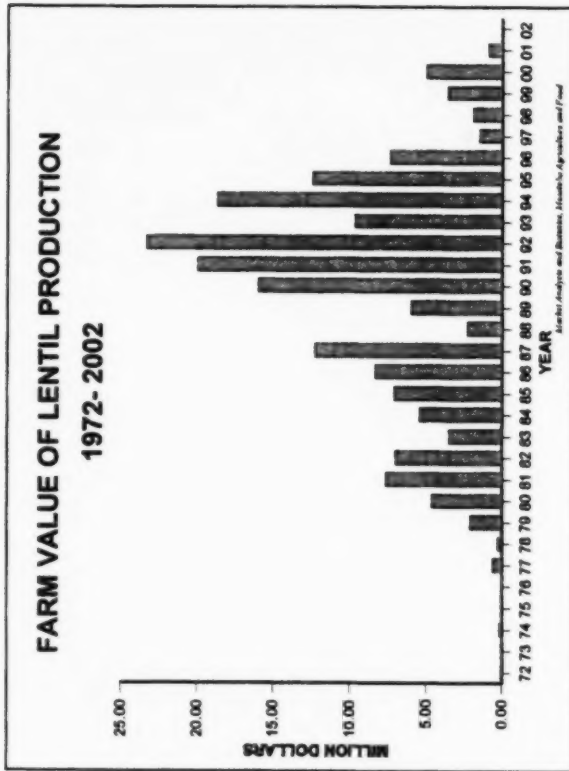


AREA OF LENTILS SEEDED BY PROVINCE, 2001



LENTIL PRODUCTION AS A PERCENTAGE OF CANADIAN PRODUCTION, 1981-2002





2001 EXPORTS OF LENTILS

Million Dollars



2001 IMPORTS OF LENTILS

Million Dollars



MUSTARD SEED SECTOR



MUSTARD SEED SECTOR PROFILE

Production:

Mustard seed production began in Manitoba in 1952 with 1,300 acres planted. The dry conditions of the Prairies are well suited to mustard seed production and much of the world's crop comes from Western Canada, particularly Saskatchewan. Although Manitoba grows less than 10 percent of the Canadian mustard seed crop, mustard seed is a good alternative cash crop to traditional grains and oilseeds. The harvested area of mustard seed peaked in 1968 at 65,000 acres, while ten years later production was record high at 64 million pounds. The planted area declined in the years, 1998-2000, to 10,000 acres or less. In 2001, there were 20,000 acres of mustard seeded and 15,000 acres harvested in the province, but improved prices led to 30,000 acres seeded and harvested in 2002. Most of Manitoba's plantings are yellow mustard with smaller amounts of brown and Oriental mustard varieties.

Mustard seed yields were highest at 1,214 pounds per acre in 1991. Yields, averaging 750 pounds per acre in 2001 and 730 pounds per acre in 2002 were about 9 percent below the 10-year average of 800 pounds per acre. The 2002 mustard crop of 22 million pounds was 95 percent larger than the 2001 crop of 11.3 million pounds.

Average mustard seed prices ranged between \$0.07 and \$0.182 per pound until 2001, when the average price was a record \$0.307 per pound. This was more than double the average price of \$0.152 per pound for the 2000 crop. Using the same price, the 2002 crop was valued at about \$6.75 million, almost double the 2001 value of \$3.5 million and six times the 2000 crop value of \$1.1 million.

Marketing:

Annual cash receipts for the sector declined from \$2.2 million in 1997 to \$0.8 million in 2000, but increased to \$1.8 million in 2001 and \$4.1 million in 2002. Manitoba's contribution to Canadian mustard seed receipts rose from 0.9 percent in 1999 to 4.0 percent in 2001.

Mustard seed is delivered by producers to cleaning plants, such as Northern Sales, which separate and clean the seed to the specifications required by processors. The cleaned seed is shipped in bags or bulk by truck or rail to mustard mills in Hamilton and Montreal in Eastern Canada or to mills in states such as North Dakota and Missouri.

Manitoba markets yellow mustard (also known as white) for processing into American hot dog mustard, which uses the whole seed for a milder product and gets its yellow colour from turmeric. It is also used in processed meats for flavour and as a high-protein extender. The Oriental varieties can be pressed into oil used for cooking in some Asian countries. Brown mustard seed produces a hot mustard used in European products such as Dijon. The kernel of the seed is milled into flour for the hotter mustards. Most name brand, prepared mustards are a custom blend of yellow and Oriental mustard flour.

Processing:

Small amounts of mustard seed are processed in Manitoba. Organic, wild mustard seed is marketed by Crystal River Foods in Clearwater. Processors of prepared mustard in Manitoba include Elman's Food Products in Winnipeg. Venture Seeds Ltd. (1999) in Brunkild, offers contract production as well as spot price purchasing of yellow, oriental and brown mustard seed. The company cleans and ships raw product to users in both the local and international markets.

Trade:

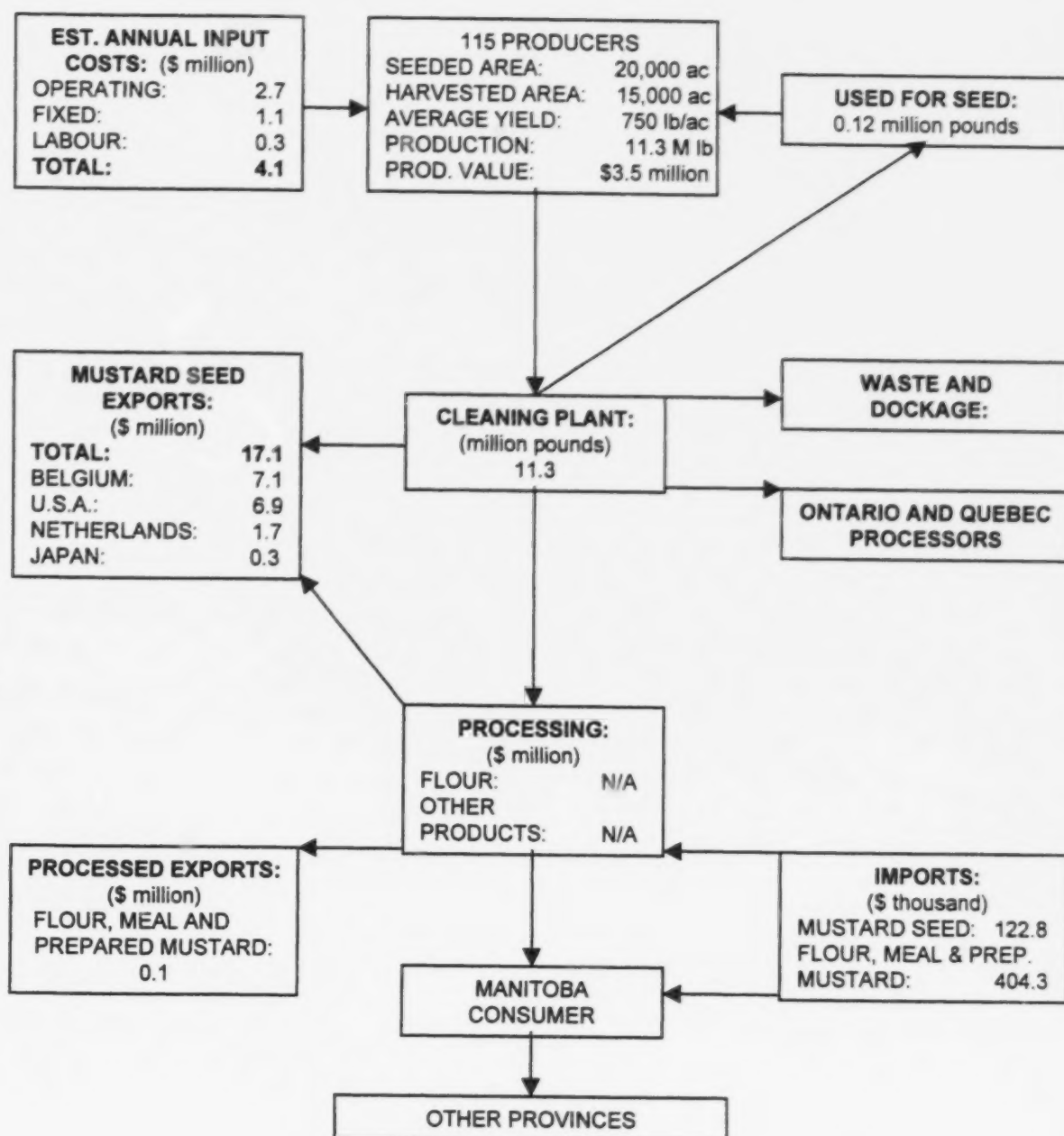
Small quantities of Manitoba's mustard seed are sent to processors in Eastern Canada. Most mustard exports, valued at \$17.1 million in 2001, went to 20 countries, mainly Belgium, the United States and the Netherlands. Mustard flour and prepared mustard, valued at \$128,000, were exported to countries such as the United States, Australia and Japan.

Manitoba imported about \$122,800 of mustard seed and \$404,300 of mustard flour and prepared mustard in 2001, mostly from the United States.

MUSTARD SEED SECTOR

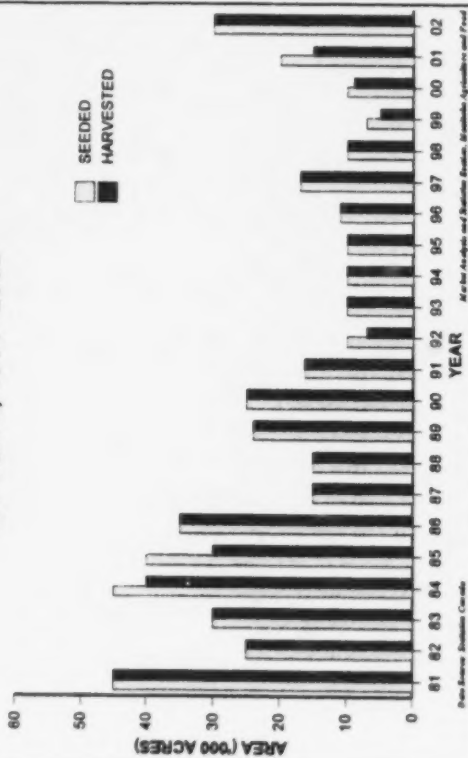
	<u>1998</u>	<u>1999</u>	<u>2000^R</u>	<u>2001^P</u>	<u>2002^P</u>	'02 as a % of '01
Estimated Number of Farms	100	70	100	115	115	100
CROP PRODUCTION:						
Seeded Area ('000 acres):	10	7	10	20	30	150
% of Canada	1.4	1.0	1.9	4.9	4.2	
Harvested Area ('000 acres):	10	5	9	15	30	200
Yield/acre (pounds):	760	820	810	750	730	97
Production (million lb):	7.6	4.1	7.3	11.3	22.0	195
% of Canada	1.4	0.6	1.6	4.9	6.5	
Average Price (\$/lb):	0.168	0.137	0.152	0.307	0.307	100
VALUE OF PRODUCTION						
(\$ million):	1.24	0.56	1.10	3.47	6.75	195
ESTIMATED TOTAL EXPENSES						
(\$/acre):	221.04	221.31	217.91	203.78	189.71	93
CASH RECEIPTS (\$ million):						
	1.5	0.8	0.8	1.8	4.1	228
% of Canada	1.7	0.9	1.2	4.0		
EXPORTS (\$ million):						
	13.7	14.4	12.2	17.2	16	93
Mustard Seed	13.5	14.2	12.0	17.1	16	93
Flour, Meal and Prepared Mustard	0.2	0.2	0.2	0.1	0	
IMPORTS (\$ thousand):						
	352.1	320.2	354.7	527.1	1,350	256
Mustard Seed	48.6	73.8	42.3	122.8	950	774
Flour, Meal and Prepared Mustard	303.5	246.5	312.4	404.3	400	99

MUSTARD SEED INDUSTRY CHART, 2001

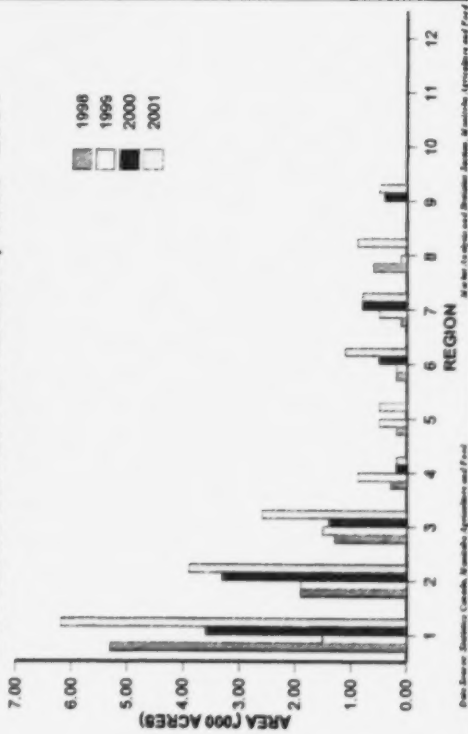


DATA SOURCE: Manitoba Agriculture and Food, Statistics Canada, Agriculture & Agri-Food Canada

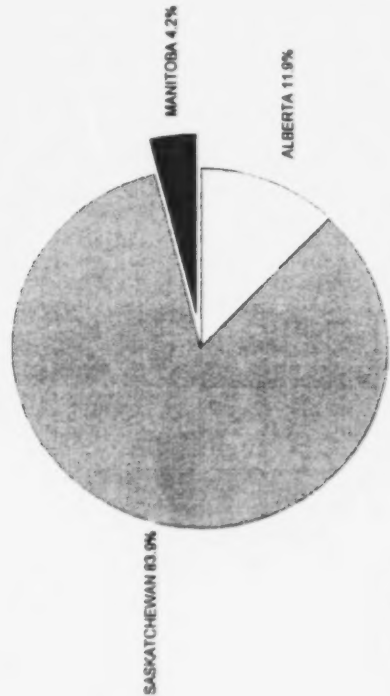
SEEDED & HARVESTED AREA OF MUSTARD SEED BY YEAR, 1981- 2002



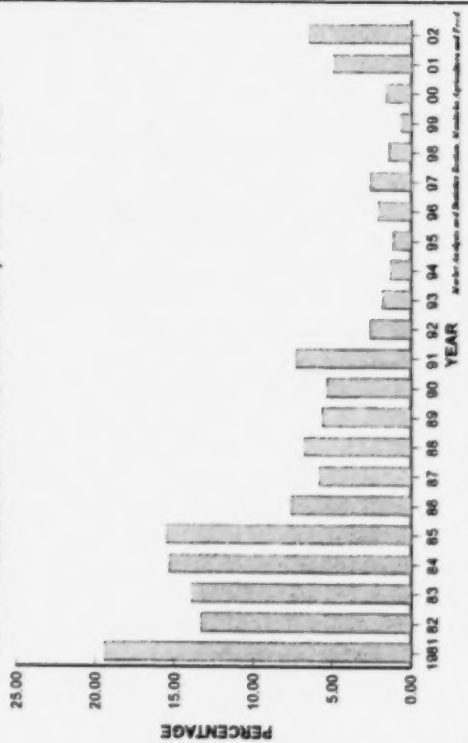
SEEDED AREA OF MUSTARD SEED BY AGRICULTURAL REGION, 1998- 2001



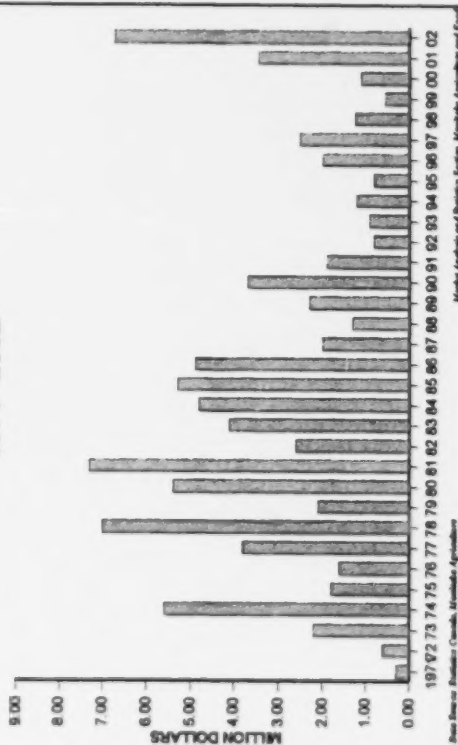
SEEDED AREA OF MUSTARD SEED BY PROVINCE, 2002



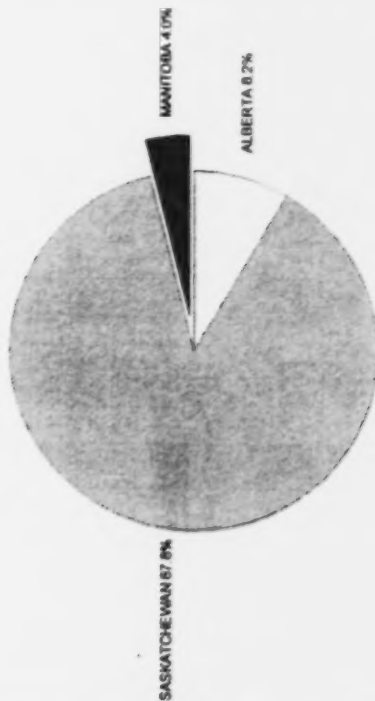
MUSTARD SEED PRODUCTION AS A PERCENT OF CANADIAN PRODUCTION, 1981 - 2002



FARM VALUE OF MUSTARD SEED PRODUCTION 1971-2002



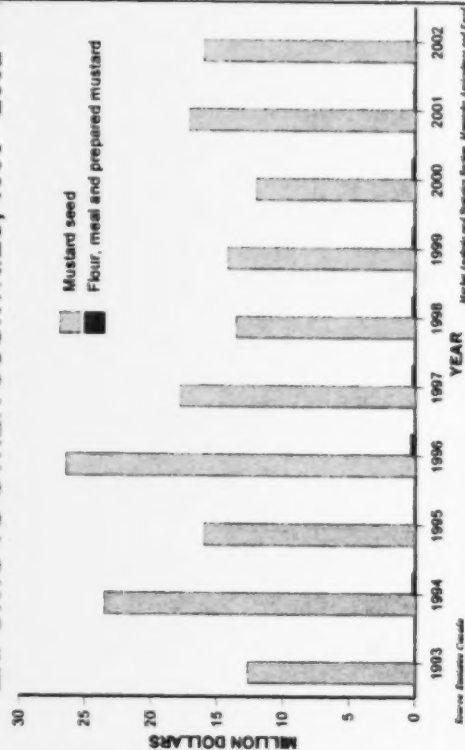
FARM CASH RECEIPTS FROM MUSTARD SEED BY PROVINCE, 2001



MUSTARD SEED PRICES 1971-2002



MANITOBA MUSTARD SEED AND PRODUCT EXPORTS TO OTHER COUNTRIES, 1993-2002



2001 EXPORTS OF MUSTARD SEED AND MUSTARD PRODUCTS Million Dollars



Source: Statistics Canada

Market Analysis and Statistics Section, Manitoba Agriculture and Food

2001 IMPORTS OF MUSTARD SEED AND MUSTARD PRODUCTS Million Dollars



Source: Statistics Canada

Market Analysis and Statistics Section, Manitoba Agriculture and Food

FORAGE SECTOR



FORAGE SECTOR PROFILE

Production:

Tame Hay: Manitoba livestock producers have been using native hay and pasture since homesteading in the province began. The first recorded production of tame or cultivated hay was in 1908, when 215,000 tons of hay were produced from 119,000 acres. The crop was priced at \$7.40 per ton for a total value of \$1.6 million. As cattle numbers increased in the 1920s, so did the area of tame hay, which was slightly over 200,000 acres until 1927 when the area doubled. The area of tame hay increased to around one million acres in the 1960s rising to 1.9 million acres during the years, 1992 to 1997, and to over two million acres from 1998 to 2002. Adverse weather conditions in many areas of the province in 1997 reduced hay yields to an average of 0.85 tons per acre, the lowest in 40 years. Less than ideal conditions in 2002 resulted in yields of 1.2 tons per acre, 20 percent below the ten-year average yield of 1.5 tons per acre. Hay production in 2002 was estimated at 2.38 million tons, a fall of 31 percent from the 2001 crop. A record average yield of 2.37 ton per acre was recorded in 1986, but tame hay production peaked in 1990 at 4 million tons.

About 75 percent of Manitoba's hay is used for beef production with about 25 percent comprised of various dairy-quality hays. Manitoba produced about 12 percent of the Canadian tame hay crop in 2002, down from 15 percent in 2001.

Average tame hay prices declined from \$59 per ton for the 1997 crop to about \$50 per ton from 1998 to 2000, but rose to \$54 per ton in 2001 and 2002. Prices were highest at \$63.50 per ton during the drought year 1980. The total value of the Manitoba tame hay crop was highest in 1993, at \$192.8 million, making it the third most valuable crop in the province that year after wheat and canola. In 1997, due to significantly reduced yields, the hay value of \$94.4 million was the lowest level since 1975, but the value increased annually to \$173.8 million in 1999. The smaller 2000 crop led to a drop in hay production value to \$157.5 million, but the value rose to \$186.3 million in 2001. The value declined to \$128.3 million in 2002.

Estimated operating expenses for tame hay production rose from \$80.25 per acre in 1997 to \$80.83 per acre in 1999, but declined to \$78.42 per acre in 2000. Expenses increased to \$89.61 per acre in 2001, but declined to \$85.21 per acre in 2002.

Forage Seeds: The first record of commercial forage seed production in Manitoba was in 1936 when the crop was valued at \$108,000. The interest in forage seed production grew and by 1979 the crop was valued at over \$8 million. Crop area, production and prices varied over the next fifteen years. The crop value went from \$14.1 million in 1987 down to a low of \$2.4 million in 1993. In 2001, a record 29.9 million pounds of forage seed, valued at \$13.5 million, were marketed from an area of about 116,000 acres. Alfalfa seed sales (pollinated by alfalfa leaf-cutting bees) were valued at \$5.0 million in 2001, followed by Timothy seed at \$3.0 million, Rye Grass seed at \$3.0 million and all Fescues at \$0.6 million. Smaller amounts of Birdsfoot Trefoil, Bromegrass, Creeping Bentgrass, Crested Wheatgrass, Kentucky Bluegrass, Reed Canary Grass, Red Clover and Sweet Clover seed are also grown in Manitoba. Manitoba produces about 30-40 percent of the forage seed marketed by Manitoba companies.

Pasture: In 2001, there were 3,905,200 acres of unimproved, native pasture and hayland in the province, down from 4,326,000 acres in 1991. Improved pastureland increased from 843,000 acres in 1991 to 947,600 acres in 2001.

Marketing:

Most of the Manitoba tame hay crop is used for beef and dairy cattle production in the province with small amounts being used for other ruminant species, such as sheep, goats, deer, elk and bison. Only a small portion of the crop is sold out of the province as hay. Some excellent dairy-quality alfalfa and alfalfa-mix hay is exported to the U.S.

Hay is sold from farm to farm, from surplus areas of the province to deficit areas. A hay listing service is provided by Manitoba Agriculture and Food.

Some of Manitoba's alfalfa and Timothy hay is sold to pelleting and compacting plants.

Annual farm cash receipts from the sector reflect only recorded exports of the hay crop, which generally are under-reported. Cash receipts from hay only were estimated at \$20 million in 2001 and \$19.8 million in 2002. Cash receipts from forage seed sales have been revised to better reflect Manitoba-origin forage seed exports. Receipts increased from \$14.9 million in 1997 to \$17.9 million in 1999, declined to \$16 million in 2000, but increased to \$17.9 million in 2001 and \$18.5 million in 2002. Manitoba's contribution to Canadian forage seed receipts rose from 19.2 percent in 1997 to 24.6 percent in 2001.

Processing:

There are two main processors of alfalfa into pellets and meal, Alfalfa Products Ltd. in Fort Whyte (Winnipeg) and Coldstream Alfalfa Processing, Ltd. in Dauphin.

Several compacting plants were operational in 2001-02, including Sunridge Forage Ltd. in Russell and Canadian Greenfield Forage in Teulon. These plants compact Timothy hay mainly for the Japanese and Korean markets. It is estimated that Timothy hay sales to these two countries in 2001 had a farm-gate value of about \$5 million. Lake Winnipeg Hay Co. in Fisher Branch is no longer in operation. The equipment from the plant has been moved to Dauphin where it will be operated under a new company, Intermountain Forage Ltd., which is expected to begin processing crop in the fall of 2003.

Trade:

Exports of hay to the United States are comprised mainly of high-quality alfalfa and alfalfa-mix bales for the dairy industry. The dairy states in the United States have been reducing their hay area in recent years, which provides an opportunity for Manitoba exporters of high-quality hay. Smaller quantities of higher-valued compressed hay were sold to 10 countries in 2001, including Japan, South Korea and the United States. Total 2001 hay exports amounted to \$8.1 million, up from \$5.6 million the year before.

Exports of alfalfa pellets and meal, mainly to Japan and the United States, totalled \$4.1 million in 2001, up significantly from \$0.3 million in 1999. Exports in 2002 could exceed \$9 million.

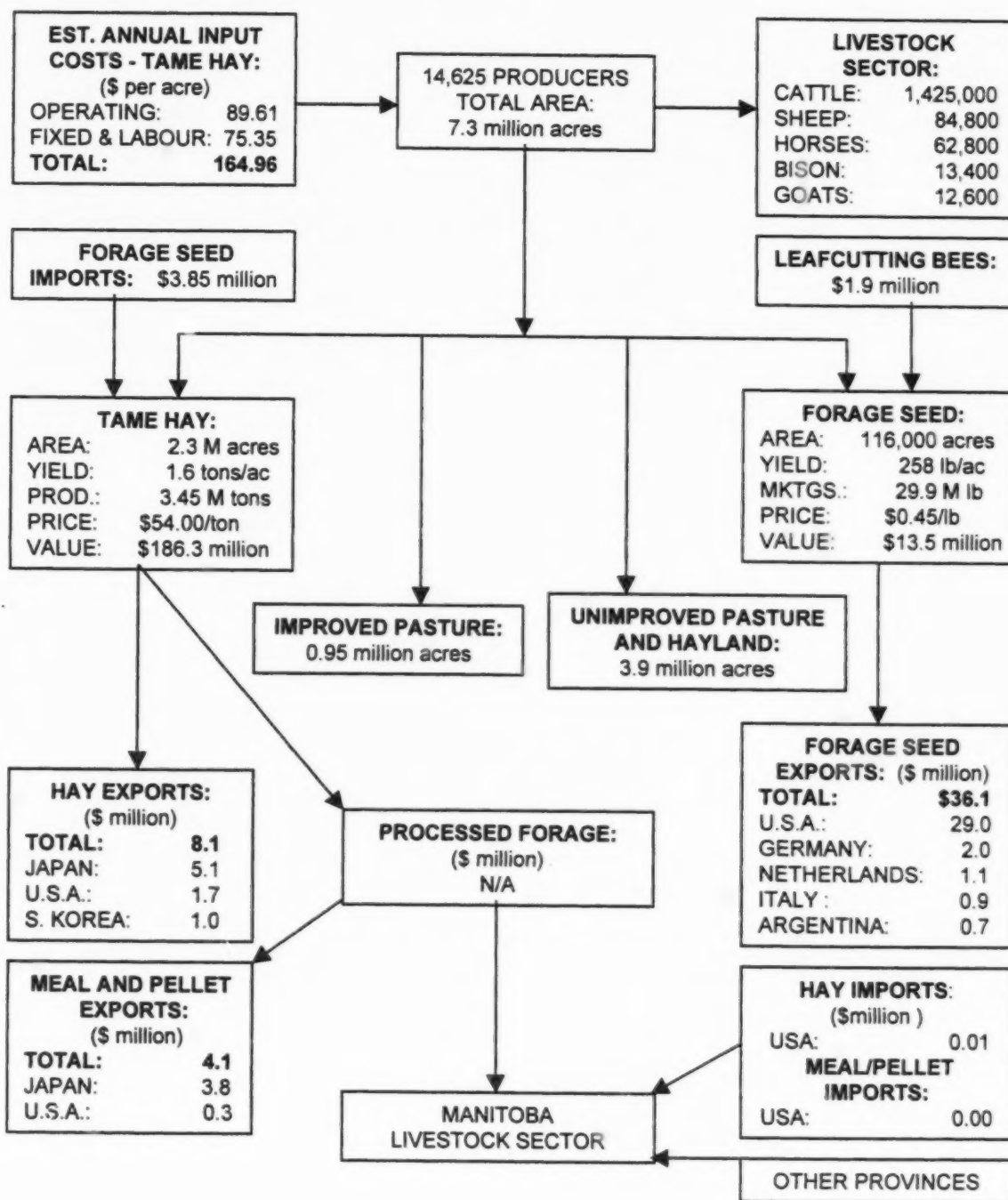
Forage seed export data for Manitoba include seed from other western provinces and small amounts of imported seed. Forage seed exports increased from \$17.4 million in 1993 to \$41.1 million in 2000, but decreased to \$36.1 million and \$32 million in 2001 and 2002 respectively. Of 22 countries which purchased forage seeds from Manitoba-based companies in 2001, the United States was Manitoba's most important customer, buying \$29.0 million or 80 percent.

Twelve countries supplied Manitoba companies with forage seeds valued at \$3.8 million in 2001, the largest supplier being the United States. This was down from \$6.7 million in 1999. Small quantities of hay were also imported from the U.S. in 2001.

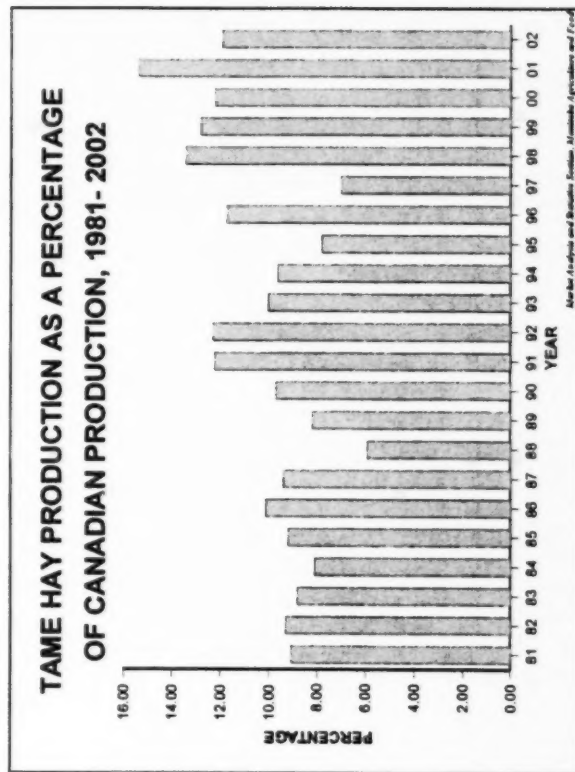
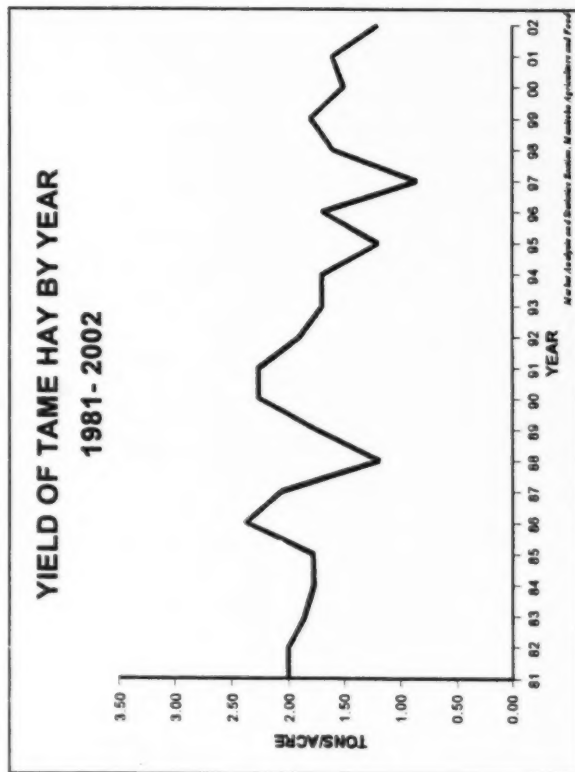
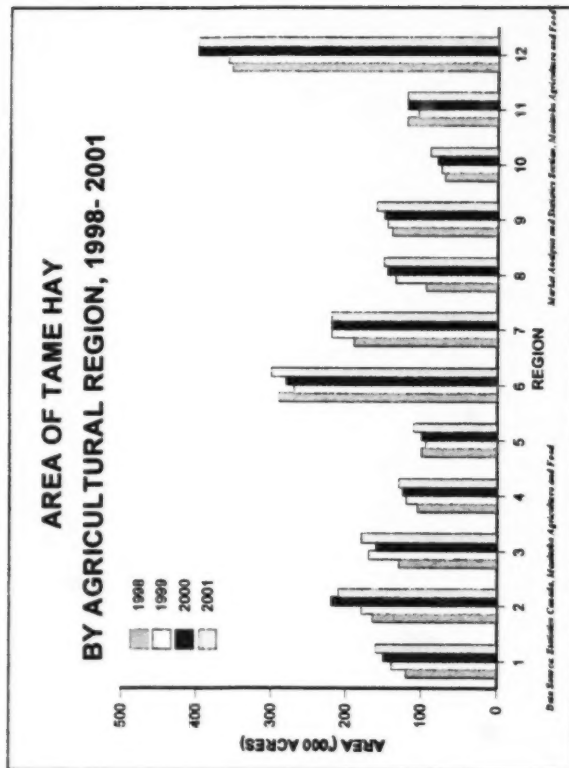
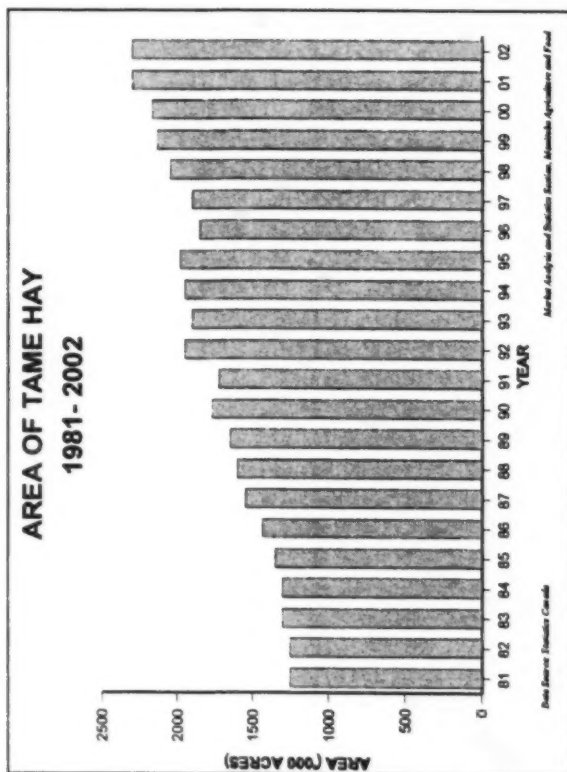
FORAGE SECTOR

	<u>1998^R</u>	<u>1999^R</u>	<u>2000^R</u>	<u>2001^R</u>	<u>2002^P</u>	'02 as a % of '01
Number of Farms with Hay/Forage	14,000	14,250	14,500	14,625	14,600	100
TAME HAY PRODUCTION:						
Seeded Area ('000 acres):	2,050	2,135	2,170	2,300	2,300	100
% of Canada	12.8	12.7	12.3	12.1	12.1	
Harvested Area ('000 acres):	1,980	1,980	2,070	2,215	2,025	91
Yield (tons/acre):	1.6	1.8	1.5	1.6	1.2	75
Production ('000 tons):	3,175	3,475	3,150	3,450	2,375	69
% of Canada	13.4	12.8	12.2	15.4	11.9	
Average Price (\$/ton):	50.00	50.00	50.00	54.00	54.00	100
VALUE OF PRODUCTION (\$ million):	158.8	173.8	157.5	186.3	128.3	69
EST. OPERATING EXPENSES (\$/acre):	80.49	80.83	78.42	89.61	85.21	95
CASH RECEIPTS (\$ million):	13.2	16.1	18.3	20.0	19.8	99
% of Canada	8.0	9.3	9.2	9.4		
FORAGE SEED PRODUCTION:						
Harvested Area ('000 acres):	70.0	100.9	117.4	116.0	N/A	
Yield (lb/acre):	230	202	238	258	N/A	
Marketings ('000 lb):	15,600	20,360	28,000	29,890	N/A	
Average Price (\$/lb):	1.13	0.88	0.57	0.45	N/A	
VALUE OF PRODUCTION (\$ million):	17.7	17.9	16.0	13.5	N/A	
CASH RECEIPTS (\$ million):	17.7	17.9	16.0	17.9	18.5	103
% of Canada	20.3	22.5	21.8	24.6		
IMPROVED PASTURE ('000 acres):	880	900	900	948	950	100
UNIMPROVED PASTURE ('000 acres):						
	4,087	4,000	3,950	3,905	3,900	100
EXPORTS (\$ million):	44.3	42.1	47.0	48.3	48.5	100
Hay	3.1	3.2	5.6	8.1	7	86
Alfalfa Pellets and Meal	0.5	0.03	0.3	4.1	9.5	232
Forage Seeds	40.7	38.8	41.1	36.1	32	89
IMPORTS (\$ million):	4.5	6.7	6.1	3.86	3.8	99
Hay	0.02	0.02	0.02	0.01	0.03	300
Alfalfa Pellets and Meal	0.0	0.0	0.0	0.0	0	
Forage Seeds	4.5	6.7	6.1	3.85	3.8	100

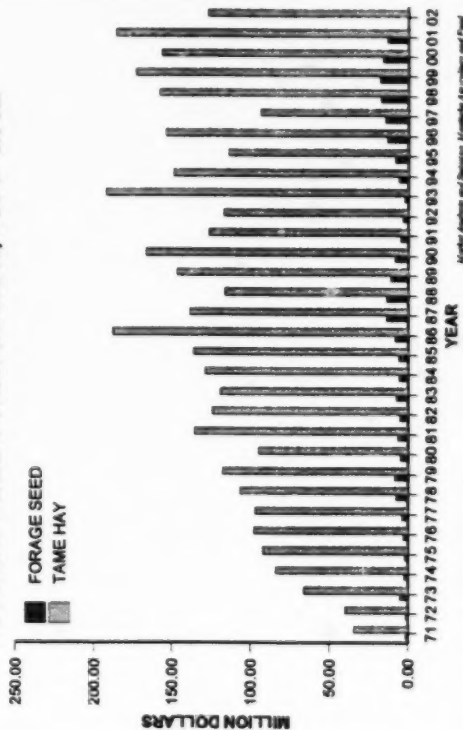
FORAGE INDUSTRY CHART, 2001



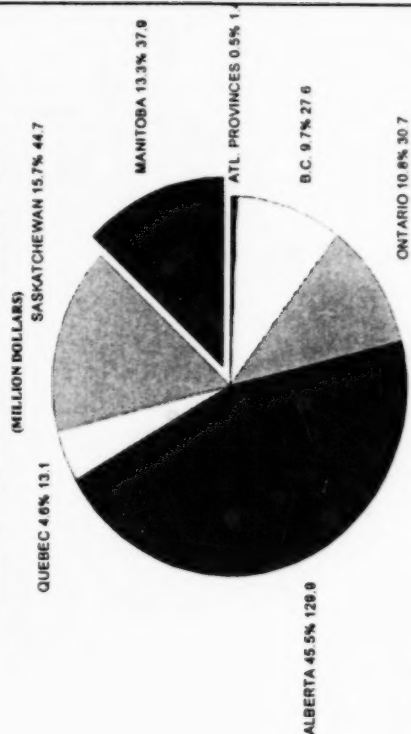
DATA SOURCE: Manitoba Agriculture and Food, Statistics Canada, Agriculture & Agri-Food Canada



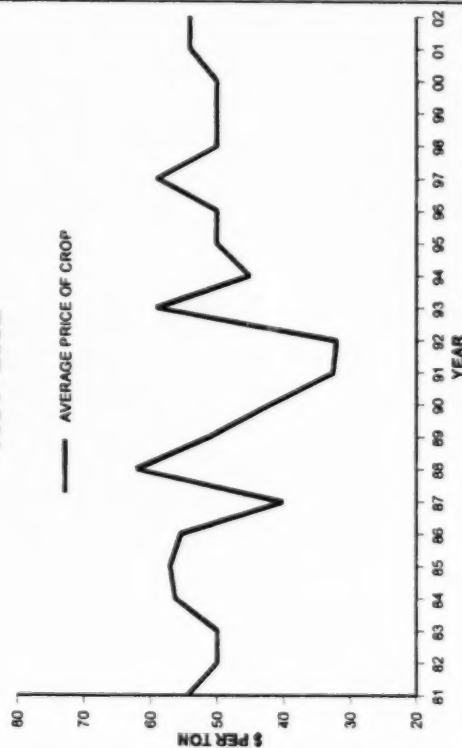
FARM VALUE OF TAME HAY AND FORAGE SEED PRODUCTION, 1971-2002



FARM CASH RECEIPTS FROM TAME HAY AND FORAGE SEED BY PROVINCE, 2001



TAME HAY PRICES 1981-2002



MANITOBA TAME HAY AND PRODUCTS EXPORTS TO OTHER COUNTRIES, 1993-2002

